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MEMORANDUM

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TO: Docket Control

FROM: Thomas M. Broderick
for Director
Utilities Division

AZ CORP COMMISSION
DOCKET CONTROL

DATE: June 14, 2016

RE: STAFF REPORT FOR TURNER RANCHES WATER & SANITATION, CO.'S
APPLICATIONS FOR A RATE INCREASE AND FINANCING (DOCKET
NOS. W-01677A-16-0076 & W-01677A-16-0074)

Attached is the Staff Report for Turner Ranches Water & Sanitation Co.'s applications for a permanent rate increase and authorization for financing. Staff recommends approval of the rate application using Staff's recommended rates and charges and conditional approval of the Financing application.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before June 24, 2016.

TMB:MJR:nr/CHH

Originator: Mary J. Rimback

Arizona Corporation Commission

DOCKETED

JUN 14 2016

DOCKETED BY	
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Service List for: Turner Ranches Water & Sanitation Co.
Docket Nos. W-01677A-16-0076 & W-01677A-0074

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**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

**TURNER RANCHES WATER & SANITATION CO.
DOCKET NOS. W-01677A-16-0076 & W-01677A-16-0074**

**APPLICATION FOR A
PERMANENT RATE INCREASE
AND FINANCING**


JUNE 14, 2016

STAFF ACKNOWLEDGMENT

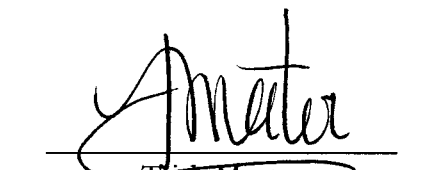
The Staff Report for Turner Ranches Water & Sanitation Co., ("Turner" or "Company") Docket Nos. W-01677A-16-0076 and W-01677A-16-0074 is the responsibility of Staff members listed below. Mary J. Rimback is responsible for the review and analysis of the Company's application, recommended revenue requirement, rate base, rate design and financial analysis. Frank Smaila is responsible for the engineering and technical analysis. Trish Meeter is responsible for reviewing the Commission's records on the Company, determining compliance with Commission policies/rules and reviewing customer complaints filed with the Commission.



Mary J Rimback
Public Utility Analyst



Frank Smaila
Utilities Engineer



Trish Meeter
Public Utilities Consumer Analyst

EXECUTIVE SUMMARY
TURNER RANCHES WATER & SANITATION CO.
DOCKET NOS. W-01677A-16-0076 (Rates) and W-01677A-16-0074 (Financing)

Turner Ranches Water & Sanitation Co. ("Turner" or "Company") is a for-profit Arizona "S" Corporation and a Class D public service corporation providing irrigation service in Maricopa and Apache Counties in Arizona. The Company indirectly provides non-potable water for irrigation purposes to over 963 residential customers. The 963 residential customers are members of a Homeowners Association ("HOA"). A single bill is transmitted to the HOA. The HOA then bills the individual residents, billings to the individual residents are at Arizona Corporation Commission ("ACC") approved tariffed rates. In addition, the Company provides non-potable water to: 135 fire hydrants, three golf courses, one cemetery, and other common areas in the East Valley including, but not limited to, the Leisure World community in Mesa, Arizona.

On March 2, 2016, the Company filed an application for a permanent rate increase. Concurrent with that filing, Turner also filed for approval of a financing application. On March 29, the Company filed an amendment to the rate application. A Procedural Order, dated May 5, 2016, consolidated the rate and financing cases.

The Company proposed permanent rates that provide total operating revenue of \$831,799 an increase of \$134,750, or 19.33 percent, over Company adjusted test year revenue of \$697,049 to provide an \$111,095 operating income on its proposed \$925,790 fair value rate base ("FVRB") which is its original cost rate base ("OCRB"). The Company's proposed rates result in a 13.36 percent operating margin. The Company proposed rates would increase the typical monthly bill for a Leisure World irrigation customer, by \$3.96 or a 17.89 per cent from \$22.14 to \$26.10.

In addition to permanent rates, the Company is requesting a debt surcharge recovery mechanism ("DSRM") to provide an additional \$65,859 in annual revenue. The DSRM is to provide for debt service on a requested \$450,000 loan.

The proposed permanent rates and the DSRM provide proposed revenue of \$897,658, an increase of \$200,609 over Company proposed test year income to provide a \$163,255 operating income on its proposed \$925,790 FVRB. The combined increase results in an operating margin of 18.19 percent. The customer notification states that this will result in an additional increase of \$5.70 per customer per month.

The rate impact proposed by the Company, would increase the typical monthly bill of a Leisure World irrigation customer by \$9.66 per customer per month or a 43.63 percent from \$22.14 to \$31.80.

Staff recommends permanent rates that produce total operating revenue of \$828,763, an increase of \$145,028, or 21.21 percent, over the Staff-adjusted test year revenue of \$683,735, to provide an \$112,204 operating income on the \$935,037 Staff-adjusted FVRB. Staff's recommended rates result in a 13.54 percent operating margin. Staff's recommended rates would increase the typical monthly bill for a residential irrigation customer by \$4.40 or 19.87 percent from \$22.14 to \$26.54 (MJR-5).

Cash flow from operations is sufficient to cover debt service on the proposed loan; thus, Staff does not recommend the DSRM proposed by the Company. The Company does not need an additional source of funds to meet its annual debt service obligation of \$57,938, as adjusted by Staff. Staff's revenue requirement results in \$213,458 of uncommitted cash flow. Staff's revenue requirement increases the Company uncommitted cash flow \$121,857 from Staff adjusted \$97,937 to \$213,458, an increase of 117.96 percent.

Staff recommends:

- Approval of Staff's rates and charges as shown in Schedule MJR-4.
- In addition to collection of its regular rate and charges, the Company may collect from its customers a proportionate share of any privilege, sales or use tax, per Arizona Administrative Code ("A.A.C.") Rule 14-2-409(D)(5).
- Directing the Company to docket with the Commission a schedule of its approved rates and charges within 30 days after the date the Decision in this matter is issued.
- Granting the Company authorization to incur a 10 year amortizing loan in an amount not to exceed \$450,000 pursuant to a loan agreement with BBVA Compass Bank at an interest rate not to exceed WSJ Prime + 1.75 percent fixed for ten years.
- Establishing an expiration date for any unused authorization to incur debt granted in this proceeding at December 31, 2017.
- Directing the Company to file as a compliance item in this Docket, within 30 days of the execution of any financing transaction authorized herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- Directing the Company to provide to the Utilities Division, upon Staff request, a copy of any BBVA Compass Bank loan documents executed pursuant to the authorizations granted herein.
- Authorizing the Company to pledge its assets in the State of Arizona pursuant to Arizona Revised Statutes § 40-285 and A.A.C. R18-15-104 in connection with the BBVA Compass Bank loan.
- Authorizing Turner to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted.
- Directing Turner, as a compliance item in this case, to notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing

and to file copies with Docket Control within 10 days of the date notice is sent to customers.

- Authorizing the depreciation rates shown in Table 6 of the Engineering Report.
- Directing the Company to install a water meter at the fire and irrigation booster station to register gallons sold to Leisure World residential customers.
- Directing that any increase in rates approved by the Commission not become effective until the first day of the month after the Company files with Docket Control, as a compliance item in this Docket, documentation from Arizona Department of Water Resources ("ADWR") indicating that Turner Ranches' water system is compliant with the departmental requirements governing water providers and/or community water systems (See Section F, ADWR Compliance, for further discussion).

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ATTACHMENT

ENGINEERING REPORT.....	ATTACHMENT A
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FACT SHEET

Company Statistics:

Current Rates: Decision No. 62319 dated February 17, 2000.

Type of Ownership: S-Corporation.

Location: The Company's service area is located in portions of Maricopa County, Arizona, including, but not limited to, the Leisure World community in Mesa, Arizona.

Rates:

Rate Application Docketed: March 2, 2016
Current Test Year Ended: December 31, 2015
Application Found Sufficient: March 31, 2016

	<u>Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Unmetered Residential (Leisure World) Turner bills Leisure World one bill and Leisure World charges a tariffed flat amount to individual Residents for irrigation	\$22.14	\$26.10	\$26.54
DSRM Surcharge	-0-	\$5.70	-0-

Customers:

Number of customers in the prior test year (12/31/1996):
Unmetered Residential Irrigation Customers approximately 900

Number of customers in the current test year (12/31/2015):
Unmetered Residential Irrigation Customers approximately 949

Current year customers by meter size:

Unmetered Residential Irrigation (monthly flat rate)	949
Unmetered Irrigation (per acre flat rate)	5
Metered Irrigation	11
1 inch Fire Service	1
4 inch Fire Service	1

FACT SHEET (CONT'D)

6 inch Fire Service	1
8 inch Fire Service	1
Seasonal customers:	unknown
Customer notification mailed:	April 5, 2016
No. of customer complaints	-0-
Percentage of complaints to customer base:	-0-

SUMMARY OF RATE FILING

The test year results, as adjusted by Staff, for Turner Ranches Water and Sanitation Company ("Turner" or "Company") show total operating revenue of \$683,735 and operating expenses of \$687,052 resulting in a \$3,317 operating loss, to provide no rate of rate of return on the \$935,037 Staff-adjusted original cost rate base ("OCRB"). Since the Company did not file reconstruction cost new information, Staff recommends recognizing a fair value rate base ("FVRB") equal to the OCRB. Staff adjusted test year revenues produce no significant operating margin and a cash flow of \$97,937.

The Company proposed revenue from permanent rates is \$831,799, as shown on page 6 of the application. Also on page 6 of the application, the Company proposes a "Debt Service Recovery Mechanism ("DSRM") in the amount of \$65,859 in additional revenues. The calculation of the DSRM is shown on Company Supplemental Schedule S-8. This is represented as a surcharge to provide debt service on a proposed financing of \$450,000.

The Company's proposed permanent rates result in operating revenues of \$831,799. The amount requested produces an increase of \$134,750 or 19.33 percent over test year revenue of \$697,049 to provide an \$111,095 operating income and a 13.36 percent operating margin. The Company proposed a \$925,790 FVRB and OCRB. The proposed revenue results in a cash flow of \$209,290. The Company's proposed rates increase the typical monthly bill for a leisure world customer by \$3.96 from \$22.14 to \$26.10 or 17.89 percent (Schedule MJR-5)

The proposed addition of a DSRM results in operating revenues of \$897,658. The amount requested including the DSRM produces an increase of \$200,609 or 28.78 percent over Company adjusted test year revenue of \$697,049 to provide a \$163,255 operating income and an 18.19 percent operating margin. The Company proposed a \$925,790 FVRB and OCRB. The proposed revenues result in a cash flow of \$265,228. The Company proposed rates including the DSRM increase the typical monthly bill for a leisure world customer by \$9.66 or 43.63 percent.

Staff recommends permanent rates that produce total operating revenue of \$828,763, an increase of \$145,028 or 21.21 percent, over the Staff-adjusted test year revenue of \$683,735, to provide an \$112,204 operating income and a 13.54 percent operating margin. Staff recommends an adjusted FVRB of \$935,037. Under Staff's recommended rate design for permanent rates, the typical monthly bill for a residential irrigation customer would increase by \$4.40, or 19.87 percent, from \$22.14 to \$26.54.

Turner provides non-potable water for irrigation purposes to approximately 963 residential customers, 135 fire hydrants, three golf courses, one cemetery, and other common areas in portions of Maricopa and Apache County, Arizona. During the test year ended December 31, 2015, Turner provided water to 4 classifications of customers: Unmetered Residential (approximately 949 are residents of Leisure World and are billed via the Homeowners Association on a flat monthly basis); Per Acre Customers (approximately 5 are billed a flat per acre per year charge); Metered Irrigation (approximately 11 customers billed a monthly charge of \$111.06 and an \$.80 per 1,000 gallons commodity charge; and lastly Fire Service which is a flat monthly charge increasing by meter size.

The Company's management functions are currently conducted through a management contract with First National Management, Inc. ("FNB"). The management contract is signed by Ron Lopez, vice president, for the Utility and Judy A. Lopez, President, of First National Management, Inc. First National Management, Inc. is paid \$17,000 per month or \$204,000 in the test year. Additionally, a management salary of \$45,000 is included in the test year. The Company rents office space from First National Management at a rate of \$1,240.80 per month or \$14,890 during the test year. The Company also rents a storage unit for approximately \$1,200 per year. A three factor allocation factor is developed for charges to Turner. The three factors are customers, net plant, and operating expenses less depreciation, income taxes, and management fees. Allocation factors are:

Beardsley 36.62%,

Turner 56.52 %

Casita Bonitas 4.07 %

Sedona (Oak Creek Water and Sewer) 2.79%

COMPANY BACKGROUND

Turner is a for-profit Arizona S-Corporation and a Class D public service corporation providing non-potable water for irrigation purposes to approximately 963 residential customers, 135 fire hydrants, three golf courses, one cemetery, and other common areas in portions of Maricopa and Apache County, Arizona, including, but not limited to, the Leisure World community in Mesa, Arizona.

The Company was formed in 1972 by Western Savings and Loan in connection with the development of the Leisure World community. In 1989, the Resolution Trust Corporation ("RTC") took control of Western Savings and Loan, Including Turner Ranches. Turner remained under the RTC until 1995, when the Federal Depository Insurance Corporation ("FDIC") took ownership. The current owner of the Company purchased it in December of 1996 from the FDIC. Current rates were established in Decision No. 62319, dated February 17, 2000. At that time, the Company also provided potable water to approximately 69 residential customers through a division named Alpine Water. Alpine Water was sold to Alpine Domestic Water Improvement District in 2009.

The Company provided an organization chart to describe the various relationships among the parties. Ronny and Judy Lopez own 100 percent of Turner. Ronny and Judy Lopez (66 2/3 percent) and Fred T. Wilkinson (33 1/3 percent) are owners of Sequoia. Sequoia in turn, owns 100 percent of FNB. In effect, Ronny and Judy Lopez own the Company and are 2/3 owners of the FNB Management Company which manages Turner. FNB manages but does not have an ownership interest in Beardsley Water Company, Casita Bonitas Sanitary Improvement District and Oak Creek Utility Corp.

Turner filed both its application for a permanent rate increase and its financing application on March 2, 2016. An amendment to the rate application was docketed on March 29. The application was found sufficient on March 31, 2016. A Procedural Order dated May 5, 2016,

consolidated the rate and financing cases. The Company docketed an affidavit that a combined rate and financing notice was sent to customers on April 5, 2016.

CONSUMER SERVICES

A review of the Consumer Service records showed that no complaints or opinions have been filed against the Company.

A review of the Company's billing format indicates that it is in compliance with the Arizona Administrative Code ("A.A.C.") R14-2-409(B)(2)

COMPLIANCE ISSUES

The Company has no delinquent compliance items with the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division. The Company is current on its property tax obligations.

The Company has a Certificate of Compliance Letter of Good Standing from the Arizona Department of Revenue as of February 10, 2016.

The Company is not currently compliant with the Arizona Department of Water Resources ("ADWR"). Staff recommended rates should not be effective until the Company is Compliant with ADWR. This is discussed in the Staff's Engineering Report.

ENGINEERING ANALYSIS

The Company proposes long term debt financing for the purpose of capital projects needed to provide reliable irrigation service. The Company submitted as Exhibit 2 to the financing application, a detailed listing of planned capital improvement projects along with estimated costs.

Staff concludes that the Capital Improvements and Maintenance Projects proposed by the Company and contained in its financial application are appropriate and their associated costs estimates appear to be reasonable. However, Staff makes no "used and useful" determination regarding improvements to be funded by the financing for rate base or ratemaking purposes.

Details of Staff's review of the system are presented in the attached Staff Engineering Report.

RATE BASE

Staff's two rate base adjustments result in a net increase to the Company's proposed rate base by \$9,247 from \$925,790 to \$935,037, as shown in Schedule MJR-2, page 1. Details of Staff's adjustments are explained below.

Plant Adjustment – In adjustment A, Staff increased plant in the amount of \$8,816. The Company provided clarifications to invoices submitted and agreed to the adjusted plant balances. The result in particular plant accounts is as shown in schedule MJR-2, page 2:

- Decrease Power Generated Equipment \$26,094
- Increase Pumping Equipment \$34,911

Accumulated Depreciation – In adjustment B, Staff made a conforming adjustment to decrease accumulated depreciation by \$431, from \$3,696,776 to \$3,696,345, as shown in Schedule MJR-2, page 3. The adjustment is to conform to the adjustments made to plant balances.

OPERATING INCOME

Staff's five operating income adjustments decrease the Company's proposed total operating revenues by \$13,314 from \$697,049 to \$683,735 and decrease the total operating expenses by \$3,079, from \$689,949 to \$686,870, as shown in Schedule MJR-3, page 1. Details of Staff's adjustments are discussed below.

Inclining Usage Revenue – Adjustment A decreases Water Revenue by \$13,314 to remove the Company pro-forma adjustment for anticipated inclining water usage. Staff engineering analysis concludes that there is a declining usage over the last ten years. And specific reference is made to certain customer's water conserving efforts in recent years. The Company's methodology includes only five years of data and provides no explanation as to why the Company should experience an inclining level of usage in future years.

Depreciation – Adjustment C increases depreciation expense by \$3,059 from \$98,195 to \$100,254 to reflect reclassification of plant, which is depreciated at different depreciation rates as shown in Schedule MJR-3, page 3.

Property Tax – Adjustment D decreases property tax expense by \$564 to reflect Staff's application of the modified version of the Arizona Department of Revenue's ("ADOR") property tax methodology which the Commission has consistently adopted.

Income Taxes – Adjustment E decreases income tax expense by \$5,591 to allow for Staff calculated income taxes on the test year operating loss for an S-Corporation.

REVENUE REQUIREMENT

Staff recommends total operating revenue from permanent rates of \$828,763, an increase of \$145,028, or 21.21 percent, over the Staff-adjusted test year revenue of \$683,735. Staff's recommended revenue provides an operating income of \$112,204 and a 13.53 percent operating margin as shown in Schedule MJR-1. Staff did not derive the revenue requirement by applying a rate of return on rate base. Staff derived the revenue requirement to provide the Company an ability to meet operating expenses and manage contingencies and to provide debt service on the Company's proposed loan.

RATE DESIGN

Schedule MJR-4 presents a complete list of the Company's present, proposed, and Staff's recommended rates and charges.

The present rate structure includes four tariffed classifications:

- Unmetered Residential monthly flat charge
- Unmetered annual charge per acre
- Metered Irrigation monthly flat charge plus a per 1,000 gallons commodity charge
- Fire Service monthly flat charge

Unmetered Residential monthly flat charge

The Company proposes an increase in the unmetered residential class in the amount of \$3.96 in permanent rates plus \$5.70 in surcharge rates resulting in a total increase of \$9.66 or 43.63 percent. Staff recommends an increase in the unmetered residential class in the amount of \$4.40 from \$22.14 to \$26.54 an increase of 19.87 percent.

Unmetered annual charge per acre

The Company proposes an increase to unmetered annual acre charged customers of \$139.85 from \$781.26 to \$921.11 or 17.90 percent. It is unclear if this classification is to be charged a \$5.70 monthly surcharge, Staff did not include this as the customers are billed on an annual basis only. Staff recommends an increase of \$155.51 to \$936.77 an increase of 19.91 percent.

Metered Irrigation monthly flat charge plus a per 1,000 gallons commodity charge

The Company proposes an increase in the monthly flat charge of \$19.88 in permanent rates plus \$5.70 in surcharge rates from \$111.04 to \$136.64 resulting in a total increase of \$25.60 or 23.05 percent. Staff recommends an increase of \$22.11 or 19.91 percent from \$111.06 to \$133.77. The Company also proposes an increase in the commodity charge of \$.16 from \$.80 per 1,000 gallons to \$.96 per 1,000 gallons or 20.00 percent. Staff recommends an increase in the commodity charge of \$.18 per 1,000 gallons or a 22.50 percent increase from \$.80 to \$.98 per 1,000 gallons.

Fire Service monthly flat charge

The Company charges fire service a flat rate per diameter of service connection. The Company proposes an increase in the monthly flat charge of \$3.31 in permanent rates plus a \$5.70 in surcharge rates from \$18.50 to \$27.51 or 48.70 percent. Staff recommends an increase in the flat rate per diameter of service connection of \$3.68 from \$18.50 to \$22.18 or 19.89 percent.

Staff recommends increasing the Company's proposed rate structure by approximately 1.7 percent to remove the inclining usage included in the Company proposed rates and recommends disallowance of the Company proposed \$5.70 surcharge to all customers.

The Company proposes and Staff recommends that meter installation charges are charged at cost as shown in MJR-4, page 1.

The Company proposes and Staff recommends no change to current charges for:

- Establishment
- Meter Test (if correct)
- Meter re-read (if correct)
- Deposit
- Deposit Interest
- Re-Establishment (within 12 months)
- Reconnection Delinquent
- NSF Check Charge
- Deferred Payment (per month)
- Late Payment penalty

The Company has proposed a change to Moving Customer Meter (Customer Request). Currently there is no tariff for this, the Company proposes and Staff recommends a charge of at cost.

The Company has proposed and Staff recommends adding an After Hours Service charge of \$50.00, currently the Company has no tariff for this category.

The Company proposes and Staff concurs with removing the current tariff for Establishment (After Hours).

The Company proposes and Staff concurs with a single meter test (if Correct) charge of \$25.00. The current tariff includes separate charges for each meter size, the Company is not currently charging by meter size and Staff recommends that the various charges by meter size be removed from the Tariff.

Staff's recommended water system service charges are shown in Schedule MJR-4, page 1.

FINANCIAL ANALYSIS – LOAN AUTHORIZATION REQUEST

Purpose and Description of the Requested Financing

The Company seeks approval for long-term financing for the purpose of capital improvements necessary to maintain service and reliability of the system. Staff's Engineer found the plan and estimated costs to be appropriate. No "used and useful" determination of the proposed plant was made, and no particular future treatment should be inferred for rate making or rate base purposes.

In anticipation of these projects, Turner applied for long term financing of \$450,000. Turner included as Exhibit 3 a "Summary of Terms and Conditions of Proposed Credit Facility" "Term Sheet" dated 1/22//16. The Term sheet was proposed by BBVA Compass bank for a SBA 7a loan not to exceed \$450,000 for a term of 10 years at an interest rates of WSJ Prime + 1.75 percent fixed for ten years. Any remaining principal and accrued interest is due at maturity. The term sheet is a proposal not a commitment. A number of calculations were included in the financing application and in subsequent data request responses. Staff's recommendations are based on the information included in the financing application term sheet. Staff calculated monthly principal and interest payments based on the term sheet provided in the application (Schedule MJR-6). Staff also used a synchronized interest calculation to normalize interest deductible for tax purposes.

Debt Service Coverage and Cash Flow Analysis

Staff recommends its permanent rates as shown on Schedule MJR-4. However, Staff does not recommend additional surcharges proposed by the Company. The proposed permanent rates provide satisfactory financial ratios to cover the debt servicing.

Staff calculated various pro-forma ratios for Company proposed permanent rates, Company proposed permanent rates plus Company proposed surcharge and Staff recommended rates (Schedule MJR-1).

Staff recommended permanent rates result in a Times Interest Earned Ratio ("TIER") of 5.98, a ratio of 2.0 or higher is considered adequate to protect the creditor's interests. Staff permanent rates allow for a Debt Service Coverage Ratio ("DSCR") of 4.10. Acceptable ratios range between 1.0 and 2.0. Staff also calculated a cash coverage ratio of 10.42, indicating that the cash flow from operations after new permanent rates are established is sufficient to cover debt service on the proposed loan.

Cash flow from operations after new rates are established is sufficient to cover debt service on the proposed loan; accordingly, the Company's requested surcharge in addition to permanent rates is not recommended. Staff prepared the cash flow analysis presented in Schedule MJR-7 and determined that the Company would have additional cash flow of \$155,521 after debt servicing.

Company Proposed Loan Surcharge

A \$5.70 per month per customer surcharge is proposed by the Company. Based on an estimated customer count of 963. The surcharge would allow for an additional \$65,859 revenues. The Company included a calculation for loan payments based on a loan amount of \$465,500 (principal and interest of \$59,715), plus pro-forma depreciation expense (\$3,778) and pro-forma increased taxes on the increased revenues.

Staff did calculate the pro-forma amounts differently, using the requested loan amount of \$450,000 and pro-forma amounts for property and income taxes and synchronized interest. The variance in the calculations is not the basis for Staff not recommending the Company proposed

surcharge; rather the financial ratios produced under either Staff's or the Company's recommendations do not suggest a need for an additional surcharge.

Capital Structure

As reported in its rate application, Turner's capital structure as of December 31, 2015, consisted of 0.0 percent short-term debt, 0.0 percent long-term debt, and 100.0 percent equity. Staff calculated a pro forma capital structure reflecting issuance of a \$450,000, loan at an interest rate of WSJ Prime + 1.75 percent fixed for ten years. Any remaining principal and accrued interest due at maturity. Pro-forma capital structure after the proposed loan is 2.85 percent short term debt, 33.62 percent long-term debt and 63.53 equity.

Encumbrance

The term sheet provided by BBVA bank stipulated Collateral of 1st lien position on Property on the land where wells are located, on equipment to be acquired and on existing equipment. Arizona Revised Statutes ("A.R.S.") § 40-285 requires public service corporations to obtain Commission authorization to encumber certain utility assets. The statute serves to protect captive customers from a utility's act to dispose of any of its assets that are necessary for the provision of service; thus, it serves to preempt any service impairment due to disposal of assets essential for providing service. Pledging assets as security typically provides benefits to the borrower in the way of increased access to capital funds or preferable interest rates, and it is often an unavoidable condition for procurement of funds for small or financially stressed entities.

STAFF RECOMMENDATIONS

Staff recommends:

- Approval of Staff's rates and charges as shown in Schedule MJR-4.
- In addition to collection of its regular rate and charges, the Company may collect from its customers a proportionate share of any privilege, sales or use tax, per Arizona Administrative Code ("A.A.C.") Rule 14-2-409(D) (5).
- Directing the Company to docket with the Commission a schedule of its approved rates and charges within 30 days after the date the Decision in this matter is issued.
- Granting the Company authorization to incur a 10 year amortizing loan in an amount not to exceed \$450,000 pursuant to a loan agreement with BBVA Compass Bank at an interest rate not to exceed WSJ Prime + 1.75 percent fixed for ten years.
- Establishing an expiration date for any unused authorization to incur debt granted in this proceeding at December 31, 2017.

- Directing the Company to file as a compliance item in this Docket, within 30 days of the execution of any financing transaction authorized herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- Directing the Company to provide to the Utilities Division, upon Staff request, a copy of any BBVA Compass Bank loan documents executed pursuant to the authorizations granted herein.
- Authorizing the Company to pledge its assets in the State of Arizona pursuant to Arizona Revised Statutes § 40-285 and A.A.C. R18-15-104 in connection with the BBVA Compass Bank loan.
- Authorizing Turner to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted.
- Directing Turner, as a compliance item in this case, to notify its customers of the authorized rates and charges approved in this proceeding, and their effective date, in a form acceptable to Staff, by means of an insert in its next regular scheduled billing and to file copies with Docket Control within 10 days of the date notice is sent to customers.
- Authorizing the depreciation rates shown in Table 6 of the Engineering Report.
- Directing the Company install a water meter at the fire and irrigation booster station to register gallons sold to Leisure World residential customers.
- Directing that any increase in rates approved by the Commission not become effective until the first day of the month after the Company files with Docket Control, as a compliance item in this Docket, documentation from Arizona Water Resources Department ("ADWR") indicating that Turner Ranches water system is compliant with the departmental requirements governing water providers and/or community water systems (See Section F, ADWR Compliance, for further discussion).

SUMMARY OF FILING

-- Present Rates --

-- Proposed Rates --

Company as Filed	Staff as Adjusted	Co. Proposed Permanent Rates ¹	Co. Proposed Surcharge ²	Permanent plus surcharge As Filed	Staff as Adjusted
Revenues:					
Water Revenue	\$683,735	\$683,735	\$815,769	\$815,769	\$828,763
Other Water Revenue	-	-	-	-	-
Surcharge	-	-	65,859	\$65,859	-
Inclining Usage Revenues	13,314	-	16,030	\$16,030	-
Total Operating Revenue	\$697,049	\$683,735	\$831,799	\$897,658	\$828,763
Operating Expenses:					
Operation and Maintenance	\$558,351	\$558,368	\$558,351	\$558,351	\$558,368
Depreciation	98,195	101,254	98,195	101,973	101,254
Taxes Other than Property and Income	3,443	3,443	3,443	3,443	3,443
Property Taxes	27,990	27,426	29,894	29,894	29,475
Income Tax	1,970	(3,439)	30,821	40,742	24,018
Total Operating Expense	\$689,949	\$687,052	\$720,704	\$734,403	\$716,558
Operating Income/(Loss)	\$7,100	(\$3,317)	\$111,095	\$163,255	\$112,204
Rate Base	\$925,790	\$935,037	\$925,790	\$925,790	\$935,037
Cash Flow	\$ 105,295	\$ 97,937	\$ 209,290	\$ 265,228	\$ 213,458
Operating Margin	1.02%	-0.49%	13.36%	18.19%	13.54%
Principal	\$ -	\$ -	\$ 34,965.00	\$ 34,965	\$ 35,150
Interest	\$ -	\$ -	\$ 24,750.00	\$ 24,750	\$ 22,787
Debt Service Coverage		\$ 59,715.00	\$ -	\$ 59,715	\$ 57,938

¹ Page 19-1 of rate application.

² Supplemental Schedule S-8 of the rate application.

RATIOS:

TIER (Times Interest Earned Ratio)

[(a) + (f)] ÷ (c)	N/M	N/M	5.73	8.24	5.98
DSC Before Income Taxes					
[(a) + (d) + (f)] ÷ [(c) + (e)]	N/M	N/M	4.02	5.12	4.10
DSC After Income Taxes					
[(a) + (d)] ÷ [(c) + (e)]	N/M	N/M	3.50	4.44	3.68
CASH COVERAGE RATIO					
[(a) + (d) + (f)] ÷ (c)	N/M	N/M	9.70	12.36	10.42

The times interest earned ratio (TIER) represents the ability of the Company to pay interest expenses before taxes. Generally a ratio of 2 or higher is considered adequate to protect the creditors interests

The Debt Service Coverage Ratio (DSCR) represents the ratio of cash available for debt servicing to interest and principal DSCR ratios required by lenders generally range between 1.0 and 2.0

Operating Margin represents the proportion of funds available to pay interest and other below the line or non-ratemaking expenses.

The cash coverage ratio is useful for determining the amount of cash available to pay for a borrower's interest expense, and is expressed as a ratio of the cash available to the amount of interest to be paid. To show a sufficient ability to pay, the ratio should be substantially greater than 1:1.

RATE BASE

	Company	----- Original Cost ----- Adjustment	Staff
1 Plant in Service	\$4,622,566	\$8,816 A	\$4,631,382
2			
3 Less:			
4 Accum. Depreciation	3,696,776	(431) B	3,696,345
5			
6 Net Plant	\$925,790	\$9,247	\$935,037
7			
8 Less:			
9 Plant Advances	-	-	-
10 Customer Security Deposits	-	-	-
11			
12 Total Advances	-	-	-
13			
14 Contributions Gross	-	-	-
15 Less:			
16 Amortization of CLAC	-	-	-
17			
18 Net CLAC	-	-	-
19			
20 Total Deductions	-	-	-
21			
22 Plus:			
23 1/24 Power	-	-	-
24			
25 1/8 Operation & Maint.	-	-	-
26			
27 Inventory	-	-	-
28			
29 Prepayments	-	-	-
30			
31 Total Additions	-	-	-
32			
33 Rate Base	\$ 925,790	\$ 9,247	\$ 935,037

Explanation of Adjustment:

A - See Schedule MJR-2, Page 2 PLANT ADJUSTMENTS

B - See Schedule MJR-2, page 3

PLANT ADJUSTMENT

		Company Exhibit	Adjustment	Staff Adjusted
1				
2	301 Organization	\$ 606	\$ -	\$ 606
3	302 Franchises	771	-	771
4	303 Land & Land Rights	30,096	-	30,096
5	304 Structures & Improvements	121,993	-	121,993
6	307 Wells & Springs	683,579	-	683,579
7	310 Power Generated Equipment	97,137	(26,094)	71,043
8	311 Pumping Equipment	1,384,287	34,911	1,419,198
9	320.1 Water Treatment Equipment	439	-	439
10	320.2 Solution Chemical Feeders	-	-	-
11	330 Distribution Reservoirs and Standpipe	781,699	-	781,699
12	330.1 Storage Tanks	-	-	-
13	330.2 Pressure Tanks	-	-	-
14	331 Transmission & Distribution Mains	1,021,190	-	1,021,190
15	333 Services	100,441	-	100,441
16	334 Meters & Meter Installations	133,054	-	133,054
17	335 Hydrants	210,874	-	210,874
18	336 Backflow Prevention Devices	-	-	-
19	339 Other Plant and Misc. Equipment	5,344	-	5,344
20	340 Office Furniture & Equipment	6,852	-	6,852
21	340.1 Computers & Software	6,514	-	6,514
22	341 Transportation Equipment	27,742	-	27,742
23	343 Tools Shop & Garage Equipment	7,016	-	7,016
24	344 Laboratory Equipment	-	-	-
25	345 Power Operated Equipment	263	-	263
26	346 Communication Equipment	2,668	-	2,668
27	347 Miscellaneous Equipment	-	-	-
28	348 Other Tangible Plant	-	-	-
29	Rounding	1	(1)	-
30				
31	TOTALS	\$4,622,566	\$8,816	\$ 4,631,381

Explanation of Adjustment A:

36	310 Power Generated Equipment	\$ 97,137	\$ (26,094)	\$ 71,043
	311 Pumping Equipment	\$ 1,384,287	\$ 34,911	\$ 1,419,198

These amounts were adjusted based on information from Company received via email on 5.17.2016.

ACCUMULATED DEPRECIATION ADJUSTMENT

		Depreciation Rates			
<u>Accumulated Depreciation</u>		Decision No.	Per Company	Per Staff	
<u>Balances</u>		60408			
301	Organization	n/a	-	-	
302	Franchises	n/a	90	90	-
303	Land & Land Rights	n/a	-	-	
304	Structures & Improvements	3.33%	107,877	107,877	-
307	Wells & Springs	3.33%	513,476	513,476	-
309					
310	Power Generation Equipment	5.00%	4,843	2,664	(2,179)
311	Pumping Equipment	12.50%	975,584	977,333	1,749
320	Water Treatment Equipment	0.00%	439	439	-
320.1	Water Treatment Plant	3.33%	-	-	-
320.2	Solution Chemical Feeders	20.00%	-	-	-
330	Dist. Reservoirs & Standpipes	0.00%	767,384	767,384	-
330.1	Storage Tanks	2.22%	-	-	-
330.2	Pressure Tanks	5.00%	-	-	-
331	Transmission & Distribution Mains	2.00%	987,069	987,069	-
333	Services	3.33%	90,179	90,179	-
334	Meters & Meter Installation	8.33%	111,940	111,940	-
335	Hydrants	2.00%	171,064	171,064	-
336	Backflow Prevention Devices	6.67%	-	-	-
339	Other Plant & Misc Equipment	0.00%	1	881	-
340	Office Furniture & Equipment	6.67%	1,179	1,179	-
340.1	Computers & Software	20.00%	3,554	3,554	-
341	Transportation Equipment	20.00%	(45,787)	(45,787)	-
342	Stores Equipment	4.00%	-	-	-
343	Tools, Shop, & Garage Equipmt	5.00%	4,280	4,280	-
344	Laboratory Equipment	10.00%	-	-	-
345	Power Operated Equipment	5.00%	262	262	-
346	Communication Equipment	10.00%	2,461	2,461	-
347	Miscellaneous Equipment	10.00%	-	-	-
348	Other Tangible Plant	2.50%	-	-	-
			<u>\$ 3,696,775</u>	<u>3,696,345</u>	<u>\$ (430)</u>

	<u>Amount</u>
Accumulated Depreciation - Per Company, Page 15	\$3,696,776
Accumulated Depreciation - Per Staff	<u>3,696,345</u>
Adjustment	B
	<u><u>(\$431)</u></u>

Accumulated Depreciation Adjustment Conforming to Plant Adjustment

	Effective Depreciation rate	Plant Adjustment	Time Period	Adjustment
311 Pumping Equipment	0.0334	34,911	1.50	1,749
310 Power Generation Equipment	0.0334	(26,094)	2.50	(2,179)

STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$683,735	\$ -	\$683,735
000 Inclining Usage Revenue	13,314	(13,314) A	-
474 Other Water Revenues	-	-	-
Total Operating Revenue	\$697,049	(\$13,314)	\$683,735
Operating Expenses:			
601 Salaries and Wages	45,000	-	45,000
604 Employee Pension & Benefits	-	-	-
610 Purchased Water	-	-	-
615 Purchased Power	244,703	-	244,703
618 Chemicals	-	-	-
620 Repairs and Maintenance	13,049	-	13,049
621 Office Supplies & Expense	7,340	-	7,340
630 Outside Services	212,476	-	212,476
635 Water Testing	430	17 B	447
427.2 Customer Security Deposit Interest	-	-	-
641 Rents	16,104	-	16,104
650 Transportation Expenses	-	-	-
657 Insurance - General Liability	5,929	-	5,929
659 Insurance - Health and Life	4,218	-	4,218
666 Rate Case Expense	8,333	-	8,333
675 Miscellaneous Expense	769	-	769
403 Depreciation Expense	98,195	3,059 C	101,254
408 Taxes Other Than Income	3,443	-	3,443
408.11 Property Taxes	27,990	(564) D	27,426
409 Income Tax	1,970	(5,409) E	(3,439)
Total Operating Expenses	689,949	(2,897)	687,052
OPERATING INCOME/(LOSS)	\$7,100	(\$10,417)	(\$3,317)

STAFF ADJUSTMENTS

A	INCLINING USAGE - Per Company	\$13,314	
	Per Staff	0	(\$13,314)
-	Decrease test year revenues to -0- inclining usage		
B	WATER TESTING - Per Company	\$430	
	Per Staff	447	\$17
	To recognize the average on-going water testing expenses.		
C	DEPRECIATION--Per Company	\$98,195	
	Per Staff	101,254	\$3,059
	To conform to plant adjustments		
D	PROPERTY TAXES - per Company	\$27,990	
	Per Staff	27,426	(\$564)
	To reflect application of the modified version of the ADOR property tax methodology.		
E	INCOME TAXES - per Company	\$1,970	
	Per Staff	(3,439)	(\$5,409)
	To reflect allowance for S-Corporation Income taxes.		

OPERATING INCOME ADJUSTMENT D - DEPRECIATION EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY PROPOSED	[B] STAFF ADJUSTMENTS	[C] STAFF RECOMMENDED	[D]	[E]	[F]	
1	Depreciation Expense	\$ 98,195	\$ 3,059	\$ 101,254				
					1,419,198			
Line No.	ACCT NO.	DESCRIPTION	Company Proposed PLANT IN SERVICE BALANCE	STAFF PLANT BALANCE	Non-Depreciable Fully Depreciated Plant	STAFF DEPR. PLANT BALANCE	STAFF RECOMMENDED RATE	STAFF RECOMMENDED EXPENSE
1		Plant In Service						
2	301	Organization	\$ 606	606	\$ 606	\$ -	0.00%	\$ -
3	302	Franchises	771	771	\$ 771	-	0.00%	-
4	303	Land & Land Rights	30,096	30,096	\$ 30,096	-	0.00%	-
5	304	Structures & Improvements	121,993	121,993	\$ 102,976	19,017	3.33%	633
6	307	Wells & Springs	683,579	683,579	501,213	182,366	3.33%	6,073
7	310	Power Generating Equipment	97,137	71,043	-	71,043	5.00%	3,552
8	311	Pumping Equipment	1,384,287	1,419,198	797,821	621,377	12.50%	77,672
9	320.1	Water Treatment Plants	439	439	439	-	3.33%	-
10	320.2	Solution Chemical Feeders	-	-	-	-	20.00%	-
11	330	Dist. Reservoirs & Standpipes	781,699	781,699	765,235	16,464	2.22%	366
12	330.1	Storage Tanks	-	-	-	-	2.22%	-
13	330.2	Pressure Tanks	-	-	-	-	5.00%	-
14	331	Transmission & Distribution Mains	1,021,190	1,021,190	983,337	37,853	2.00%	757
15	333	Services	100,441	100,441	89,641	10,800	3.33%	360
16	334	Meters & Meter Installations	133,054	133,054	108,455	24,599	8.33%	2,049
17	335	Hydrants	210,874	210,874	133,168	77,706	2.00%	1,554
18	336	Backflow Prevention Devices	-	-	-	-	6.67%	-
19	339	Other Plant and Misc. Equipment	5,344	5,344	-	5,344	6.67%	356
20	340	Office Furniture & Equipment	6,852	6,852	659	6,193	6.67%	413
	340.1	Computers & Software	6,514	6,514	-	6,514	20.00%	1,303
21	341	Transportation Equipment	27,742	27,742	-	27,742	20.00%	5,548
22	343	Tools Shop & Garage Equipment	7,016	7,016	-	7,016	5.00%	351
23	344	Laboratory Equipment	-	-	-	-	10.00%	-
24	345	Power Operated Equipment	263	263	263	-	5.00%	-
25	346	Communication Equipment	2,668	2,668	-	2,668	10.00%	267
26	347	Miscellaneous Equipment	-	-	-	-	10.00%	-
27	348	Other Tangible Plant	-	-	-	-	2.50%	-
28			-	-	-	-		-
29			-	-	-	-		-
30		Subtotal General	\$ 4,622,565	\$ 4,631,382	\$ 3,514,680	\$ 1,116,702		\$ 101,254
31		Less: Non- depreciable Account(s)	31,473	3,514,680	3,514,679	-		
32		Depreciable Plant (L29-L30)	\$ 4,591,092	\$ 1,116,702		\$ 1,116,702		
33								
34		Contributions-in-Aid-of-Construction (CIAC)					\$ -	
35		Weighted Average Depreciation/Amortization Rate					9.0672%	
36		Less: Amortization of CIAC (L32 x L33)						\$ -
37		Depreciation Expense - STAFF						\$ 101,254
38								
39		Pro Forma Depreciation Expense Calculation						
40								
41		Plant in Service	\$ 4,631,382					
42		Less:						
43		Non-Depreciable plant	3,514,680					
44		Depreciable Plant	\$ 1,116,702					
45		Times: Staff weighted average depreciation	9.0672%					
46		Depreciation expense before amortization	101,254					
47		Less: Amortization of CIAC	-					
48		Test Year Depreciation - Staff	101,254					
49		Depreciation expense - Company	98,195					
50		Staff recommended adjustment	\$ 3,059					

OPERATING INCOME ADJUSTMENT H - PROPERTY TAXES--S-CORP

LINE NO.	Property Tax Calculation	[A]		[B]	
		STAFF AS ADJUSTED		STAFF RECOMMENDED	
1	Staff Adjusted Test Year Revenues - 2015	\$	683,735	\$	683,735
2	Weight Factor		2		2
3	Subtotal (Line 2 * Line 3)	\$	1,367,470	\$	1,367,470
4	Staff Adjusted Test Year Revenues - 2015		683,735		
5	Staff Recommended Revenue, Per Schedule MJR-1				837,553
6	Subtotal (Line 3 + Line 4)	\$	2,051,205	\$	2,205,023
7	Number of Years		3		3
8	Three Year Average (Line 6 / Line 7)	\$	683,735	\$	735,008
9	Department of Revenue Multiplier		2		2
10	Revenue Base Value (Line 8 * Line 9)	\$	1,367,470	\$	1,470,015
11	Plus: 10% of CWIP -				-
12	Less: Net Book Value of Licensed Vehicles		73,529		73,529
13	Full Cash Value (Line 10 + Line 11 - Line 12)	\$	1,293,941	\$	1,396,486
14	Assessment Ratio		18.0%		18.0%
15	Assessment Value (Line 13 * Line 14)		232,909	\$	251,367
16	Composite Property Tax Rate (Company Property Tax ÷ Assessment Value)		11.7753%		11.7753%
17					
18	Staff Proposed Property Tax Expense (Line 15 * Line 16)	\$	27,426		
19	Company Proposed Property Tax		27,990		
20					
21	Staff Test Year Adjustment (Line 18-Line 19)	\$	(564)		
22	Property Tax - Staff Recommended Revenue (Line 15 * Line 16)			\$	29,599
23	Staff Test Year Adjusted Property Tax Expense (Line 18)			\$	27,426
24	Increase/(Decrease) to Property Tax Expense			\$	2,173
25					
26	Increase/(Decrease) to Property Tax Expense			\$	2,173
27	Increase in Revenue Requirement				153,818
28	Increase/(Decrease) to Property Tax per Dollar Increase in Revenue (Line 26/Line 27)				1.413036%
29					
30	Increase in Revenue Requirement				
31					
32					
33					
34	References:				
35	Col [A]: Company				
36	Col [B]: Staff Report				
37					

S-Corp Tax Calculation

LINE NO.	DESCRIPTION	(A)	(B)	(C)
1	<u>Calculation of Gross Revenue Conversion Factor:</u>			
2	Revenue	100.0000%		
3	Uncollectible Factor (Line 14)	0.0000%		
4	Revenues (L1 - L2)	100.0000%		
5	Combined Federal and State Income Tax and Property Tax Rate (Line 30)	20.3451%		
6	Subtotal (L3 - L4)	79.6549%		
7	Revenue Conversion Factor (L1 / L5)	1.255415		
8				
9	<u>Calculation of Uncollectible Factor:</u>			
10	Unity	100.0000%		
11	Combined Federal and State Tax Rate (Line 22)	19.20%		
12	One Minus Combined Income Tax Rate (L11 - L12)	80.80%		
13	Uncollectible Rate	0.0000%		
14	Uncollectible Factor (L9 * L10)	0.0000%		
15				
16	<u>Calculation of Effective Tax Rate:</u>			
17	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%		
18	Arizona State Income Tax Rate	3.2090%		
19	Federal Taxable Income (L17 - L18)	96.7910%		
20	Applicable Federal Income Tax Rate (Line 82)	16.5246%		
21	Effective Federal Income Tax Rate (L19 x L20)	15.9943%		
22	Combined Federal and State Income Tax Rate (L18 +L21)		19.20%	
23				
24	Calculation of Effective Property Tax Factor			
25	Unity	100.00%		
26	Combined Federal and State Income Tax Rate (L22)	19.20%		
27	One Minus Combined Income Tax Rate (L25-L26)	80.80%		
28	Property Tax Factor (MJR-W17, L27)	1.41%		
29	Effective Property Tax Factor (L27*L28)	1.14%		
30	Combined Federal and State Income Tax and Property Tax Rate (L22+L29)		20.35%	
31				
32				
33	Required Operating Income (Schedule Summary Schedule MJR-1)	\$ 112,204		
34	Adjusted Test Year Operating Income (Loss) (Schedule MJR-1)	\$ (3,317)		
35	Required Increase in Operating Income (L33 - L34)		\$ 115,522	
36				
37	Income Taxes on Recommended Revenue (Col. C, L65)	\$ 24,018		
38	Income Taxes on Test Year Revenue (Col. A, L65)	\$ (3,439)		
39	Required Increase in Revenue to Provide for Income Taxes (L37 - L38)		\$ 27,457	
40				
41	Recommended Revenue Requirement (Schedule MJR-1)	\$ 828,763		
42	Uncollectible Rate (Line 13)	0.0000%		
43	Uncollectible Expense on Recommended Revenue (L41 * L42)	\$ -		
44	Adjusted Test Year Uncollectible Expense	\$ -		
45	Required Increase in Revenue to Provide for Uncollectible Exp. (L43 - L45)		\$ -	
46	Property Tax with Recommended Revenue (Schedule S-Prop Taxes L22)	\$ 29,475		
47	Property Tax on Test Year Revenue (Schedule S-Prop Taxes L18)	\$ 27,426		
48	Increase in Property Tax Due to Increase in Revenue (L46-47)		\$ 2,049	
49				
50	Total Required Increase in Revenue (L35 + L39 + L45 + L48)		\$ 145,028	Staff
51	<u>Calculation of Income Taxes:</u>	Test Year		Recommended
52	Revenue (Schedule MJR-1)	\$ 683,735	\$ 145,028	\$ 828,763
53	Operating Expenses Excluding Income Taxes	\$ 690,491	\$ -	\$ 692,540
54	Synchronized Interest	\$ 17,953		\$ 17,953
55	Arizona Taxable Income (L52 - L53 - L54)	\$ (24,709)		\$ 118,270
56	Arizona State Income Tax Rate Married Filing Jointly	3.21%		3.21%
57	0 \$20,325 x .0259	\$ -		\$ -
58	\$20,325 to \$50,812 x .0288 minus \$59.00	\$ (771)		\$ -
59	\$50,812 to \$101,623 x .0336 minus \$303.00	\$ -		\$ -
60	\$101,623 to \$304,868 x .0424 minus \$1,197.00	\$ -		\$ 3,818
61	\$304,868 and over x .0454 minus \$2,112.00	\$ -		\$ -
62	Subtotal Arizona Income Tax	\$ (771)		\$ 3,818
63	Federal Taxable Income (L55 - L57)	\$ (23,938)		\$ 114,452
64	Federal Tax on First Income Bracket (\$1 - \$18,450) @ 10%	\$ (1,845)		\$ 1,845
65	Federal Tax on Second Income Bracket (\$18,451 - \$74,900) @ 15%	\$ (823)		\$ 8,467
66	Federal Tax on Third Income Bracket (\$74,901 - \$151,200) @ 25%	\$ -		\$ 9,888
67	Federal Tax on Fourth Income Bracket (\$151,201 - \$230,450) @ 28%	\$ -		\$ -
68	Federal Tax on Fifth Income Bracket (\$230,451 - \$411,500) @ 33%	\$ -		\$ -
69	Federal Tax on Sixth Income Bracket (\$411,501 - \$464,850) @ 35%	\$ -		\$ -
70	Federal Tax on Seventh Income Bracket (\$464,851 - or more) @ 39.6%	\$ -		\$ -
71	Total Federal Income Tax	\$ (2,668)		\$ 20,200
	Combined Federal and State Income Tax (L62 + L69)	\$ (3,439)		\$ 24,018

RATE DESIGN

	Present Rates	Proposed Company	Recommended Staff
Residential Irrigation - Flat Rate	\$22.14	\$26.10	\$26.54
Surcharge	\$0.00	\$5.70	\$0.00
Residential Irrigation Service - Per Acre - Per Year	\$ 781.26	\$ 921.11	\$936.77
Private Fire Protection			
Flat Rate per Inch in Diameter of Service Connection	\$ 18.50	\$ 21.81	\$22.18
Metered Irrigation Service			
1-1/2" Meter	\$ 111.06	\$ 130.94	\$133.17
2" Meter	\$ 111.06	\$ 130.94	\$133.17
3" Meter	N/A	\$ 130.94	\$133.17
4" Meter	N/A	\$ 130.94	\$133.17
6" Meter	\$ 111.06	\$ 130.94	\$133.17
8" Meter	\$ 111.06	\$ 130.94	\$133.17
10" Meter	\$ 111.06	\$ 130.94	\$133.17
Gallons Included in Monthly Usage Charge	0.00		
Commodity Charge - In Excess of Minimum - 1,000 gallons	\$ 0.80	\$ 0.96	\$0.98
Metered Construction Water			
1" Meter	\$ 33.04	\$ 38.95	\$39.61
2" Meter	\$ 96.31	\$ 113.55	\$115.48
Commodity Charge - Construction Water	\$ 1.66	2.00	\$2.03
Meter Testing: Company states that these charges are not being used presently and are not proposed. Staff recommends that this be removed from the tariff currently on file with the Arizona Corporation Commission			
5/8" x 3/4" Meter	\$ 25	N/T	N/T
3/4" Meter	\$ 25	N/T	N/T
1" Meter	\$ 30	N/T	N/T
1 1/2" Meter	\$ 40	N/T	N/T
2" Meter	\$ 45	N/T	N/T
3" Meter	N/A	N/T	N/T
4" Meter	\$ 120	N/T	N/T
6" Meter	\$ 180	N/T	N/T
8" Meter	\$ 200	N/T	N/T
10" Meter	\$ 220	N/T	N/T

TEMPORARY SURCHARGES FROM DECISION NO. 62319

VARIOUS N/T N/T

Service Line and Meter Installation Charges

	Present Service Line Charges	Present Meter Installation Charges	Present Total	Company Proposed Service Line Charges	Company Proposed Meter Installation Charges	Company Proposed Total	Staff Recommended Service Line Charges	Staff Recommended Meter Installation Charges	Staff Recommended Total
5/8" x 3/4" Meter	\$ -	\$ 400	\$ 400	N/A	At Cost	\$ -	N/A	At Cost	\$ -
3/4 inch Meter	\$ -	\$ 440	\$ 440	N/A	At Cost	\$ -	N/A	At Cost	\$ -
1" Meter	\$ -	\$ 500	\$ 500	N/A	At Cost	\$ -	N/A	At Cost	\$ -
1 1/2" Meter	\$ -	\$ 715	\$ 715	N/A	At Cost	\$ -	N/A	At Cost	\$ -
2" Meter Turbo	\$ -	\$ 715	\$ 715	N/A	At Cost	\$ -	N/A	At Cost	\$ -
2" Meter Compound	\$ -	\$ 1,700	\$ 1,700	N/A	At Cost	\$ -	N/A	At Cost	\$ -
3" Meter Turbo	\$ -	\$ 1,585	\$ 1,585	N/A	At Cost	\$ -	N/A	At Cost	\$ -
3" Meter Compound	\$ -	\$ 2,190	\$ 2,190	N/A	At Cost	\$ -	N/A	At Cost	\$ -
4" Meter Turbo	\$ -	\$ 2,540	\$ 2,540	N/A	At Cost	\$ -	N/A	At Cost	\$ -
4" Meter Compound	\$ -	\$ 3,215	\$ 3,215	N/A	At Cost	\$ -	N/A	At Cost	\$ -
6" Meter Turbo	\$ -	\$ 4,915	\$ 4,915	N/A	At Cost	\$ -	N/A	At Cost	\$ -
6" Meter Compound	\$ -	\$ 6,270	\$ 6,270	N/A	At Cost	\$ -	N/A	At Cost	\$ -
8" & Larger				N/A	At Cost		N/A	At Cost	

	Present Rates	Proposed Company	Recommended Staff
Service Charges			
Establishment	\$ 20.00	\$ 20.00	\$ 20.00
Establishment (After 1 Hour)	\$ 30.00	N/T	N/T
Reconnection (Delinquent)	\$ 20.00	\$ 20.00	\$ 20.00
Meter Test (If Correct)	\$ 25.00	\$ 25.00	\$ 25.00
Deposit *	*	*	*
Deposit Interest	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	\$ 15.00	\$ 15.00	\$ 15.00
Deferred Payment	***	***	***
Meter Re-Read (If Correct)	\$ 15.00	\$ 15.00	\$ 15.00
Late Fee	1.50%	1.50%	1.50%
After 1 Hour Service Charge	N/T	\$ 50.00	\$ 50.00
Moving Customer Meter (Customer Request)	N/T	Cost	Cost

* Per Commission Rules (R14-2-403.B)

** Months off system times the minimum (R14-2-403.D)

*** 2.00% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$10.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines separate and distinct from the primary water service line.

Notation: The Company is not currently charging the surcharge, the surcharge expired one year after it was authorized, however, for clarity, Staff recommends this be removed from the Company's tariff on file with the Arizona Corporation Commission.

Typical Bill Analysis

Unmetered Residential Irrigation

	Gallons	Present Rates	Proposed Rates Incl Surcharge	Dollar Increase	Percent Increase
	Flat Rate	\$ 22.14	\$ 26.10	\$ 3.96	17.89%
Surcharge	Flat Rate	-	5.70	\$ 5.70	
Total		\$ 22.14	\$ 31.80	\$ 9.66	43.63%
Staff Recommended					

	Flat Rate	\$ 22.14	\$ 26.54	\$ 4.40	19.87%
Surcharge	Flat Rate	-	-	\$ -	

Present & Proposed Rates (Without Taxes)

Gallons	Present	Company Proposed	%	Staff Recommended	%
	3/4 -Inch Meter Rates	3/4 -Inch Meter Rates	Increase	3/4 -Inch Meter Rates	Increase
Consumption					
-	\$ 22.14	\$ 26.10	17.89%	\$ 26.54	19.87%
1,000	22.14	26.10	17.89%	26.54	19.87%
2,000	22.14	26.10	17.89%	26.54	19.87%
3,000	22.14	26.10	17.89%	26.54	19.87%
3,500	22.14	26.10	17.89%	26.54	19.87%
4,000	22.14	26.10	17.89%	26.54	19.87%
5,000	22.14	26.10	17.89%	26.54	19.87%
5,100	22.14	26.10	17.89%	26.54	19.87%
6,800	22.14	26.10	17.89%	26.54	19.87%
7,800	22.14	26.10	17.89%	26.54	19.87%
8,800	22.14	26.10	17.89%	26.54	19.87%
9,800	22.14	26.10	17.89%	26.54	19.87%
10,800	22.14	26.10	17.89%	26.54	19.87%
11,800	22.14	26.10	17.89%	26.54	19.87%
12,800	22.14	26.10	17.89%	26.54	19.87%
13,800	22.14	26.10	17.89%	26.54	19.87%
14,800	22.14	26.10	17.89%	26.54	19.87%
15,800	22.14	26.10	17.89%	26.54	19.87%
16,800	22.14	26.10	17.89%	26.54	19.87%
17,800	22.14	26.10	17.89%	26.54	19.87%
18,800	22.14	26.10	17.89%	26.54	19.87%
19,800	22.14	26.10	17.89%	26.54	19.87%
20,800	22.14	26.10	17.89%	26.54	19.87%
25,800	22.14	26.10	17.89%	26.54	19.87%
30,800	22.14	26.10	17.89%	26.54	19.87%
35,800	22.14	26.10	17.89%	26.54	19.87%
40,800	22.14	26.10	17.89%	26.54	19.87%
45,800	22.14	26.10	17.89%	26.54	19.87%
50,800	22.14	26.10	17.89%	26.54	19.87%
75,800	22.14	26.10	17.89%	26.54	19.87%
100,800	22.14	26.10	17.89%	26.54	19.87%

PROPOSED LOAN AMORTIZATION:

Loan Amount Requested:	\$450,000		
Down Payment:	\$0		
Amount Financed:	\$450,000		
Number of years:	10	Compounding Period:	12
Interest rate (r):	5.25%	APR:	5.38%

LOAN AMORTIZATION SCHEDULE

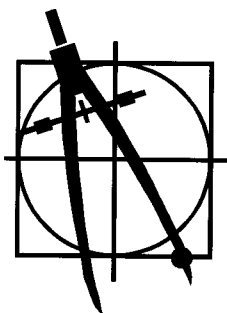
Period	Loan payment (1)	Beginning-of-month principal (2)	Payments		End-of-month principal (5)	Annual Interest (6)	Annual Principal (7)	Annual Debt Payment (8)
			Interest [r * (2)] (3)	Principal [(1) - (3)] (4)				
1	4,828.13	449,000.00	\$1,968.75	\$2,859.38	\$447,140.62			
2	4,828.13	447,140.62	1,956.24	2,871.89	444,268.74			
3	4,828.13	444,268.74	1,943.68	2,884.45	441,384.29			
4	4,828.13	441,384.29	1,931.06	2,897.07	438,487.22			
5	4,828.13	438,487.22	1,918.38	2,909.75	435,577.47			
6	4,828.13	435,577.47	1,905.65	2,922.48	432,654.99			
7	4,828.13	432,654.99	1,892.87	2,935.26	429,719.73			
8	4,828.13	429,719.73	1,880.02	2,948.10	426,771.63			
9	4,828.13	426,771.63	1,867.13	2,961.00	423,810.63			
10	4,828.13	423,810.63	1,854.17	2,973.96	420,836.67			
11	4,828.13	420,836.67	1,841.16	2,986.97	417,849.71			
12	4,828.13	417,849.71	1,828.09	3,000.03	414,849.67	22,787.19	35,150.33	57,937.52
13	4,828.13	414,849.67	1,814.97	3,013.16	411,836.51			
14	4,828.13	411,836.51	1,801.78	3,026.34	408,810.17			
15	4,828.13	408,810.17	1,788.54	3,039.58	405,770.59			
16	4,828.13	405,770.59	1,775.25	3,052.88	402,717.71			
17	4,828.13	402,717.71	1,761.89	3,066.24	399,651.47			
18	4,828.13	399,651.47	1,748.48	3,079.65	396,571.82			
19	4,828.13	396,571.82	1,735.00	3,093.13	393,478.70			
20	4,828.13	393,478.70	1,721.47	3,106.66	390,372.04			
21	4,828.13	390,372.04	1,707.88	3,120.25	387,251.79			
22	4,828.13	387,251.79	1,694.23	3,133.90	384,117.89			
23	4,828.13	384,117.89	1,680.52	3,147.61	380,970.28			
24	4,828.13	380,970.28	1,666.74	3,161.38	377,808.90	20,896.74	37,040.78	57,937.52
25	4,828.13	377,808.90	1,652.91	3,175.21	374,633.68			
26	4,828.13	374,633.68	1,639.02	3,189.10	371,444.58			
27	4,828.13	371,444.58	1,625.07	3,203.06	368,241.52			
28	4,828.13	368,241.52	1,611.06	3,217.07	365,024.45			
29	4,828.13	365,024.45	1,596.98	3,231.14	361,793.31			
30	4,828.13	361,793.31	1,582.85	3,245.28	358,548.03			
31	4,828.13	358,548.03	1,568.65	3,259.48	355,288.55			
32	4,828.13	355,288.55	1,554.39	3,273.74	352,014.81			
33	4,828.13	352,014.81	1,540.06	3,288.06	348,728.75			
34	4,828.13	348,728.75	1,525.68	3,302.45	345,424.30			
35	4,828.13	345,424.30	1,511.23	3,316.90	342,107.40	18,904.62	39,032.90	57,937.52
36	4,828.13	342,107.40	1,496.72	3,331.41	338,776.00			
37	4,828.13	338,776.00	1,482.14	3,345.98	335,430.02			
38	4,828.13	335,430.02	1,467.51	3,360.62	332,069.40			
39	4,828.13	332,069.40	1,452.80	3,375.32	328,694.07			
40	4,828.13	328,694.07	1,438.04	3,390.09	325,303.98			
41	4,828.13	325,303.98	1,423.20	3,404.92	321,899.06			
42	4,828.13	321,899.06	1,408.31	3,419.82	318,479.24			
43	4,828.13	318,479.24	1,393.35	3,434.78	315,044.46			
44	4,828.13	315,044.46	1,378.32	3,449.81	311,594.65			
45	4,828.13	311,594.65	1,363.23	3,464.90	308,129.75			
46	4,828.13	308,129.75	1,348.07	3,480.06	304,649.70			
47	4,828.13	304,649.70	1,332.84	3,495.28	301,154.41			
48	4,828.13	301,154.41	1,317.55	3,510.58	297,643.84	16,805.36	41,132.16	57,937.52
49	4,828.13	297,643.84	1,302.19	3,525.93	294,117.90			
50	4,828.13	294,117.90	1,286.77	3,541.36	290,576.54			
51	4,828.13	290,576.54	1,271.27	3,556.85	287,019.68			
52	4,828.13	287,019.68	1,255.71	3,572.42	283,447.27			
53	4,828.13	283,447.27	1,240.08	3,588.04	279,859.22			
54	4,828.13	279,859.22	1,224.38	3,603.74	276,255.48			
55	4,828.13	276,255.48	1,208.62	3,619.51	272,635.97			
56	4,828.13	272,635.97	1,192.78	3,635.34	269,000.63			
57	4,828.13	269,000.63	1,176.88	3,651.25	265,349.38			
58	4,828.13	265,349.38	1,160.90	3,667.22	261,682.16			
59	4,828.13	261,682.16	1,144.86	3,683.27	257,998.89			
60	4,828.13	257,998.89	1,128.75	3,699.38	254,299.51	14,593.19	43,344.33	57,937.52
61	4,828.13	254,299.51	1,112.56	3,715.57	250,583.94			
62	4,828.13	250,583.94	1,096.30	3,731.82	246,852.12			
63	4,828.13	246,852.12	1,079.98	3,748.15	243,103.97			
64	4,828.13	243,103.97	1,063.58	3,764.55	239,339.42			
65	4,828.13	239,339.42	1,047.11	3,781.02	235,558.41			
66	4,828.13	235,558.41	1,030.57	3,797.56	231,760.85			
67	4,828.13	231,760.85	1,013.95	3,814.17	227,946.67			
68	4,828.13	227,946.67	997.27	3,830.86	224,115.81			
69	4,828.13	224,115.81	980.51	3,847.62	220,268.19			
70	4,828.13	220,268.19	963.67	3,864.45	216,403.74			
71	4,828.13	216,403.74	946.77	3,881.36	212,522.38			
72	4,828.13	212,522.38	929.79	3,898.34	208,624.04	12,262.05	45,675.47	57,937.52
73	4,828.13	208,624.04	912.73	3,915.40	204,708.64			
74	4,828.13	204,708.64	895.60	3,932.53	200,774.12			
75	4,828.13	200,774.12	878.40	3,949.73	196,828.39			
76	4,828.13	196,828.39	861.12	3,967.01	192,869.37			
77	4,828.13	192,869.37	843.76	3,984.37	188,895.01			
78	4,828.13	188,895.01	826.33	4,001.80	184,897.22			
79	4,828.13	184,897.22	808.82	4,019.31	180,885.90			
80	4,828.13	180,885.90	791.24	4,036.89	176,871.01			
81	4,828.13	176,871.01	773.57	4,054.55	172,842.46			
82	4,828.13	172,842.46	755.84	4,072.29	168,799.17			
83	4,828.13	168,799.17	738.02	4,090.11	164,660.06			
84	4,828.13	164,660.06	720.13	4,108.00	160,492.06	9,805.54	48,131.98	57,937.52
85	4,828.13	160,492.06	702.15	4,125.97	156,366.08			
86	4,828.13	156,366.08	684.10	4,144.03	152,222.06			
87	4,828.13	152,222.06	665.97	4,162.16	148,059.90			
88	4,828.13	148,059.90	647.76	4,180.36	143,879.54			
89	4,828.13	143,879.54	629.47	4,198.65	139,680.89			
90	4,828.13	139,680.89	611.10	4,217.02	135,463.86			
91	4,828.13	135,463.86	592.65	4,235.47	131,228.39			
92	4,828.13	131,228.39	574.12	4,254.00	126,974.39			
93	4,828.13	126,974.39	555.51	4,272.61	122,701.77			
94	4,828.13	122,701.77	536.82	4,291.31	118,410.47			
95	4,828.13	118,410.47	518.05	4,310.08	114,100.39			
96	4,828.13	114,100.39	499.19	4,328.94	109,771.45	7,216.91	50,720.61	57,937.52
97	4,828.13	109,771.45	480.25	4,347.88	105,423.57			
98	4,828.13	105,423.57	461.23	4,366.90	101,056.67			
99	4,828.13	101,056.67	442.12	4,386.00	96,670.67			
100	4,828.13	96,670.67	422.93	4,405.19	92,265.48			
101	4,828.13	92,265.48	403.66	4,424.47	87,841.01			
102	4,828.13	87,841.01	384.30	4,443.82	83,397.19			
103	4,828.13	83,397.19	364.86	4,463.26	78,933.93			
104	4,828.13	78,933.93	345.34	4,482.79	74,451.14			
105	4,828.13	74,451.14	325.72	4,502.40	69,948.73			
106	4,828.13	69,948.73	306.03	4,522.10	65,426.63			
107	4,828.13	65,426.63	286.24	4,541.89	60,884.75			
108	4,828.13	60,884.75	266.37	4,561.76	56,322.99	4,489.06	53,448.46	57,937.52
109	4,828.13	56,322.99	246.41	4,581.71	51,741.28			
110	4,828.13	51,741.28	226.37	4,601.76	47,139.52			
111	4,828.13	47,139.52	206.24	4,621.89	42,517.63			
112	4,828.13	42,517.63	186.01	4,642.11	37,875.51			
113	4,828.13	37,875.51	165.71	4,662.42	33,213.09			
114	4,828.13	33,213.09	145.31	4,682.82	28,530.27			
115	4,828.13	28,530.27	124.82	4,703.31	23,836.97			
116	4,828.13	23,836.97	104.24	4,723.88	19,103.08			
117	4,828.13	19,103.08	83.58	4,744.55	14,338.53			
118	4,828.13	14,338.53	62.82	4,765.31	9,553.22			
119	4,828.13	9,553.22	41.57	4,786.16	4,807.07			
120	4,828.13	4,807.07	21.03	4,807.10	(0.03)	1,614.50	56,323.02	57,937.52

CASH FLOW ANALYSIS

Line No.		Company Proposed Proposed Loan and SC	Staff Recommendd W/Proposed Loan
Cash Inflows			
1	461 Metered Water Revenue	\$815,769	\$828,763
	000 Inclining Usage Revenue	16,030	-
1	474 Other Water Revenues	-	-
2	Surcharge	65,859	-
3	Total Revenue	897,658	828,763
Cash Outflows			
4	601 Salaries and Wages	45,000	45,000
5	610 Purchased Water	-	-
6	615 Purchased Power	244,703	244,703
7	618 Chemicals	-	-
8	620 Repairs and Maintenance	13,049	13,049
9	621 Office Supplies & Expense	7,340	7,340
10	630 Outside Services	212,476	212,476
11	635 Water Testing	430	447
12	427.2 Customer Security Deposit Interest	-	-
	641 Rents	16,104	16,104
13	650 Transportation Expenses	-	-
14	657 Insurance - General Liability	5,929	5,929
15	659 Insurance - Health and Life	4,218	4,218
16	666 Rate Case Expense	8,333	8,333
17	675 Miscellaneous Expense	769	769
18	403 Depreciation Expense	101,973	101,254
19	408 Taxes Other Than Income	3,443	3,443
20	408.11 Property Taxes	29,894	29,475
21	409 Income Tax	40,742	24,018
22	Total Expenses	734,403	716,558
23	Operating Income	163,255	112,204
24	Plus: Depreciation Expense	101,973	101,254
25	Less: Loan Payment Interest	24,750	22,787
26	Less: Loan Payment Principal	34,965	35,150
27	AIAC Refunds	-	-
28	Cash Flow from Operations	205,513	155,521
29			
30	Cash Flow from Operations after BBVA Loan	205,513	155,521
	Operating Income	163,255	112,204

CAPITAL STRUCTURE

	Proposed		Recommended	
Short Term Debt	\$ 34,965	2.83%	\$ 35,150	2.85%
Long Term Debt	\$ 415,035	33.64%	\$ 414,850	33.62%
Stockholders Equity	\$ 783,915	63.53%	\$ 783,915	63.53%
	\$ 1,233,915	100.00%	\$ 1,233,915	100.00%



**Engineering Report for
Turner Ranches Water and Sanitation
Company Application**

Docket No. W-01677A-16-0074 (Financing)

Docket No. W-01677A-16-0076 (Rates)

**By Frank M. Smaila
Utilities Engineer**

May 23, 2016

CONCLUSIONS

- A. Turner Ranches Water and Sanitation Company ("Turner Ranches" or "Company") is a Class D water utility company.
- B. The Company's rate and financial applications were consolidated by the Hearing Division on May 5, 2016.
- C. The Company's water system only provides irrigation and fire protection services.
- D. The Company's water system consists of five wells, two booster stations, 221 fire hydrants and a distribution system serving four customers during the test year ending December 31, 2015.
- E. The Company had a water loss of 0.02 percent during the test year 2015, which is within the acceptable limit of 10 percent recommended by Utilities Division Staff ("Utilities Staff" or "Staff").
- F. The Company's system has adequate irrigation and fire protection capacity to serve the current customer base and reasonable growth. The system utilizes a series of lakes instead of storage tanks.
- G. The Company does not anticipate an increase in its customer base or new development in its CC&N within the near future.
- H. The Company does not provide potable water. Therefore, it is not regulated by the Arizona Department of Environmental Quality ("ADEQ").
- I. The Company is located in Arizona Department of Water Resources' ("ADWR") Phoenix Active Management Area ("AMA"). According to the ADWR, this Company is currently not compliant with ADWR's requirements governing water providers and/or community water systems.

- J. According to the Arizona Corporation Commission (“ACC” or “the Commission”) Utilities Division compliance database, the Company has no delinquent Commission compliance items.
- K. Staff concludes that the Capital Improvements and Maintenance Projects proposed by the Company and contained in its financial application are appropriate and their associated cost estimates appear to be reasonable.

RECOMMENDATIONS

- 1. Staff recommends that the Company install a water meter at the fire and irrigation booster station to register gallons sold to Leisure World residential customers.
- 2. Staff recommends that any increase in rates approved by the Commission not become effective until the first day of the month after the Company files with Docket Control, as a compliance item in this docket, documentation from ADWR indicating that Turner Ranches water system is compliant with departmental requirements governing water providers and/or community water systems (See Section F, ADWR Compliance, for further discussion).
- 3. Staff recommends that the Company continue to use Staff’s depreciation rates as delineated in Table 6.
- 4. Staff recommends approval of the meter and installation charges listed under “Company’s Requested/Staff Recommended Charges” in Table 7.
- 5. Staff recommends an annual water testing expense of \$447 be used for purposes of this application (See Section I.2, Water Testing Expense, for further discussion).

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A. INTRODUCTION

Turner Ranches Water and Sanitation Company's ("Turner Ranches" or "Company") office is located in Apache Junction, Arizona. In 2009, the Company was composed of two divisions, one potable water and one irrigation division. The potable water division was referred to as the Alpine Division. The Arizona Corporation Commission ("ACC" or "the Commission") in Decision No. 71710, dated June 3, 2010, approved the sale of the Alpine Division to the Alpine Domestic Water Improvement District and cancellation of the Company's Alpine Division Certificate of Convenience and Necessity ("CC&N") granted in Decision 57072, dated October 2, 1990. The Company's irrigation division CC&N is located in Apache and Maricopa Counties. Its CC&N in Apache County is comprised of roughly 390 acres or 0.6 square miles and is located approximately 22 miles southeast of Springerville.¹ The Company's CC&N in Maricopa County is comprised of roughly 4,425 acres or 6.9 square miles and is located on either side of Power Road between Broadway and Guadalupe Roads in Mesa. Turner Ranches is a Class D water utility company and only provides water for irrigation and fire protection purposes. Figure 1 and 2 shows the location of the Company in relation to other Commission regulated companies in Apache and Maricopa Counties while figures 3 and 4 shows the location of the Company's CC&N within Apache and Maricopa Counties. Figure 5 shows the Company's Maricopa County CC&N in detail.

On March 2, 2016, the Company filed with the ACC a request for a Rate Increase.² The Company indicated that its request was necessary because the water system is aging and maintenance costs have increased as well as cost increases due to inflation. The Company further states that its effluent contract with the City of Mesa ended in July 2013. As a consequence, groundwater pumping increased to make up for the loss of effluent. The increase in groundwater pumping rates also increased power requirements and were compounded by Salt River Project ("SRP") significantly increasing their power rates. The Company states, "As a result, the present rates are not allowing the Company to recover its operating expenses and earn a reasonable return on the fair value of its plant."³ The Company's current rates were approved by Decision No. 60927 (May 26, 1998) as it was amended by Decision No. 62319 (February 17, 2000).

On March 2, 2016, the Company filed a Financing Application with the ACC seeking authorization to borrow \$450,000 from BBVA Compass Bank ("Compass Bank").⁴ According to the Company the loan is required to repay First National Management⁵ ("FNM") for finances used to upgrade and perform needed maintenance on existing equipment operated by the Company and capital improvement projects necessary to maintain service and reliability of the system.⁶

On March 31, 2016, Staff filed a sufficiency letter indicating that the application had met the sufficiency requirements of the Arizona Administrative Code ("AAC").

¹ The Company is approved to provide irrigation services in Apache County. However, it does not have customers in Apache County at this time.

² Rate Increase Application, (Docket No. W-01677A-16-0076)

³ Rate Increase Application, Narrative Descriptions of Application for Rate Adjustment, Page 3.

⁴ Financing Application, (Docket No. W-01677A-16-0074)

⁵ The Company is managed by FNM. The Company pays FNM a management fee as well as rent for the use of the office building and other assets owned by FNM, per page 5 of Rate Application 16-0076.

⁶ See Section I.3, Capital Improvement Projects, for further discussion.

On May 4, 2016, Staff requested consolidation of the rate and financing cases. On May 5, 2016, a Procedural Order was issued by the Hearing Division consolidating both the rates and financing cases.⁷ This Engineering Report constitutes Staff's engineering evaluation relative to the consolidated rate and financing applications.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were field inspected on April 12, 2016, and May 14, 2016, by Utilities Division Staff ("Utilities Staff" or "Staff") Frank Smaila in the accompaniment of Mr. Ronny Lopez, water system operator.

The operation of the water system consists of five wells, two booster stations, 221 fire hydrants and a distribution system serving four customers during the test year ending December 31, 2015. The four customers include Leisure World Home Owners Association ("HOA"), Superstition Springs Golf Course, Superstition Springs HOA and Mariposa Gardens⁸. Leisure World HOA includes approximately 963 residences, two golf courses, clubhouse, fire protection and common areas. Detailed plant facility listings are as follows:

Table 1. Well Site Data

Well Site Name	TR-11	TR-10	Recker	Broadway	Taylor
ADWR No. ⁹	55-518151	55-610824	55-621102	55-621103	55-621104
Year Constructed	1987	1971	1950	1977	1949
Casing Size	16 inch	16 inch	18 inch	16 inch	20 inch
Casing Depth	1500 ft.	1100 ft.	800 ft.	1000 ft.	1040 ft.
Pump Type	Turbine	Turbine	Turbine	Turbine	Turbine
Pump Size	150 hp	250 hp	300 hp	300 hp	250 hp
Pump Yield	550 gpm	980 gpm	1200 gpm	1600 gpm	1050 gpm
Meter Size	8 inch	10 inch	10 inch *	10 inch	10 inch *
Well Active/Inactive	Active	Active	Active	Active	Inactive

Note: *Calibrated to measure in Acre-Feet.

Table 2. Booster Station Data

⁷ Consolidated Docket No. W-01677A-16-0074 ET AL.

⁸ Mariposa Gardens Memorial Park and Funeral Care ("Mariposa Gardens") funeral and cremation center has provided cemetery services since 1999.

⁹ Arizona Department of Water Resources ("ADWR") Well Identification Number.

Site	Number of Pumps at Station	Horsepower	GPM	Pump Type	Variable Frequency Drive Controlled
Fire & Irrigation Station	3	75	800	Four Stage Vertical Turbine	Yes
		60*	1,060	Three Stage Vertical Turbine	No
		60	700	Three Stage Vertical Turbine	No
Lake 5 Recirculation Station	1	15	400-500	Single Stage Vertical Turbine	No

Note* According to the operator one of the 60 hp pumps was recently rebuilt and propeller trimmed to produce 1,060 gpm.

Table 3. Water Mains

Diameter	Material	Approximate Length
6 inch	AC	9,800 ft.
8 inch	PVC	5,850 ft
8 inch	AC	45,000 ft
10 inch	AC	18,200 ft
12 inch	AC	5,800 ft.
Total		84,650 ft.

Table 4. Customer Meters

Size (in inches)	Quantity
5/8 x 3/4, 3/4 & 1	0
1-1/2	1
2	2
Compound 3, 4, 6 & 8	0
Turbo 3	1
Turbo 4	0
Turbo 6	3
Turbo 8	5
Turbo 10	4
Total	16

Table 5. Fire Hydrants

Size	Company Owned	City of Mesa Owned	Totals
Standard	135	86	221
Non Standard	0	0	0

Note: feet ("ft."), horsepower ("hp"), gallon ("gal."), gallon per minute ("GPM" or "gpm"), Polyvinyl Chloride ("PVC"), Asbestos Cement ("AC"), Water System ("WS"), Not Available ("N/A"), Lineal Feet ("LF"), inch ("in"), Cement Asbestos ("CA"), Ductile Iron Pipe ("DIP"), Booster Pump Station ("BPS"), Storage Tank ("ST"), approximately ("~"), Road ("Rd"), Waterline ("WL"), Avenue ("Ave"), Concrete Lined Cylinder ("CLC"), State Route ("SR"), Street ("Str"), temporary ("temp"), Cast Iron ("CI"), Internet Protocol ("IP"), Variable Frequency Drive ("VFD").

M A R I C O P A C O U N T Y

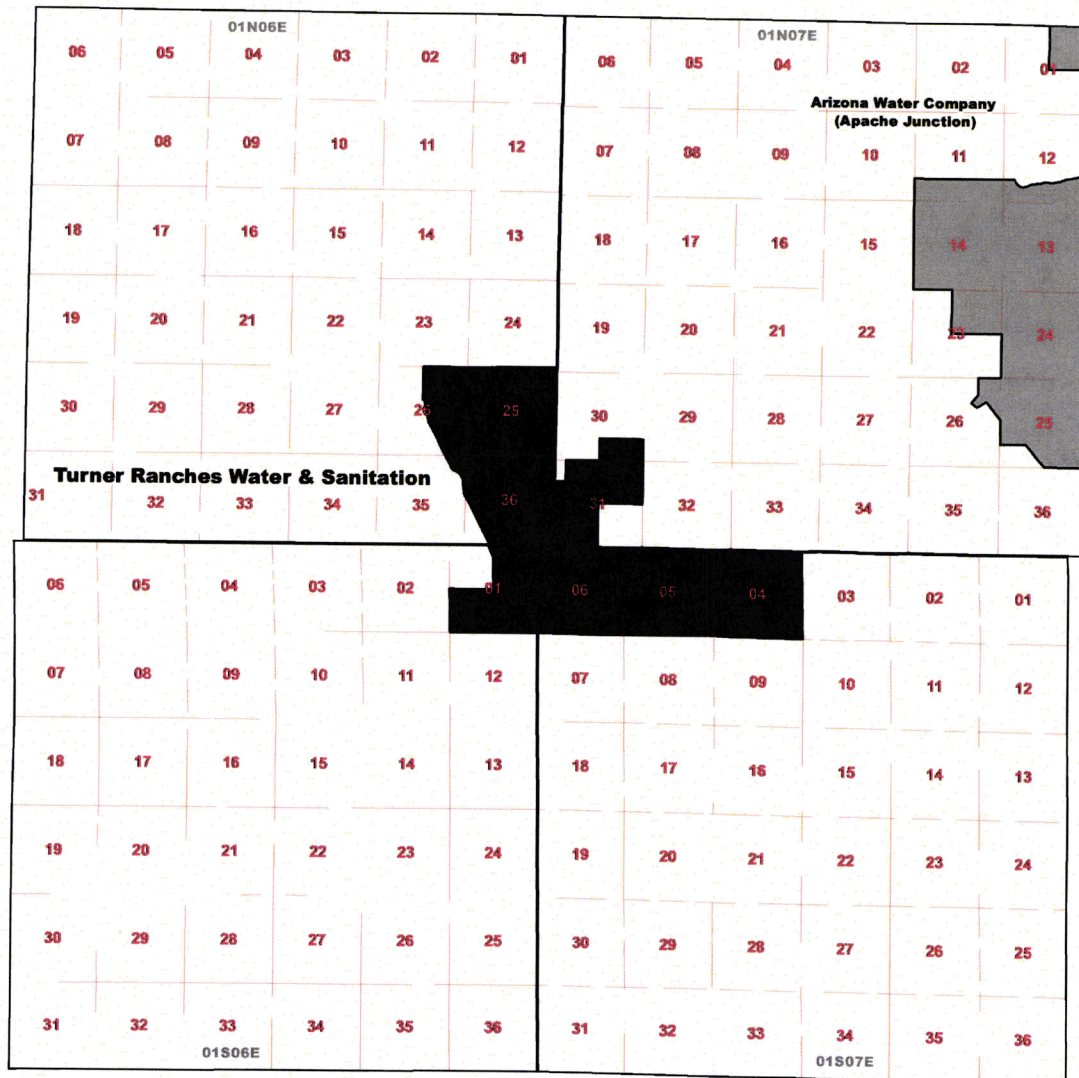


Figure 4. Certificated Area in Maricopa County

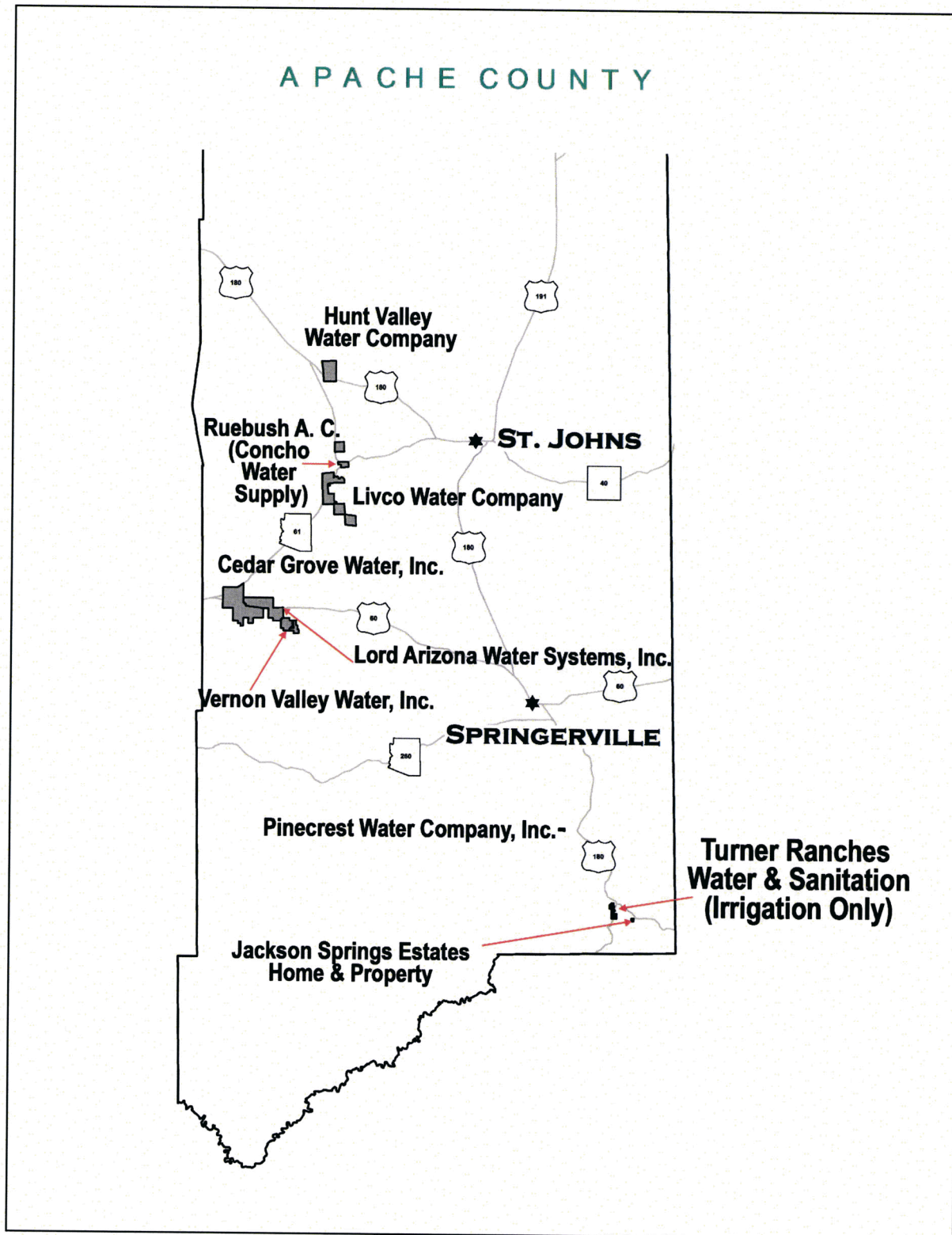


Figure 1. Apache County Map (Lower Third)

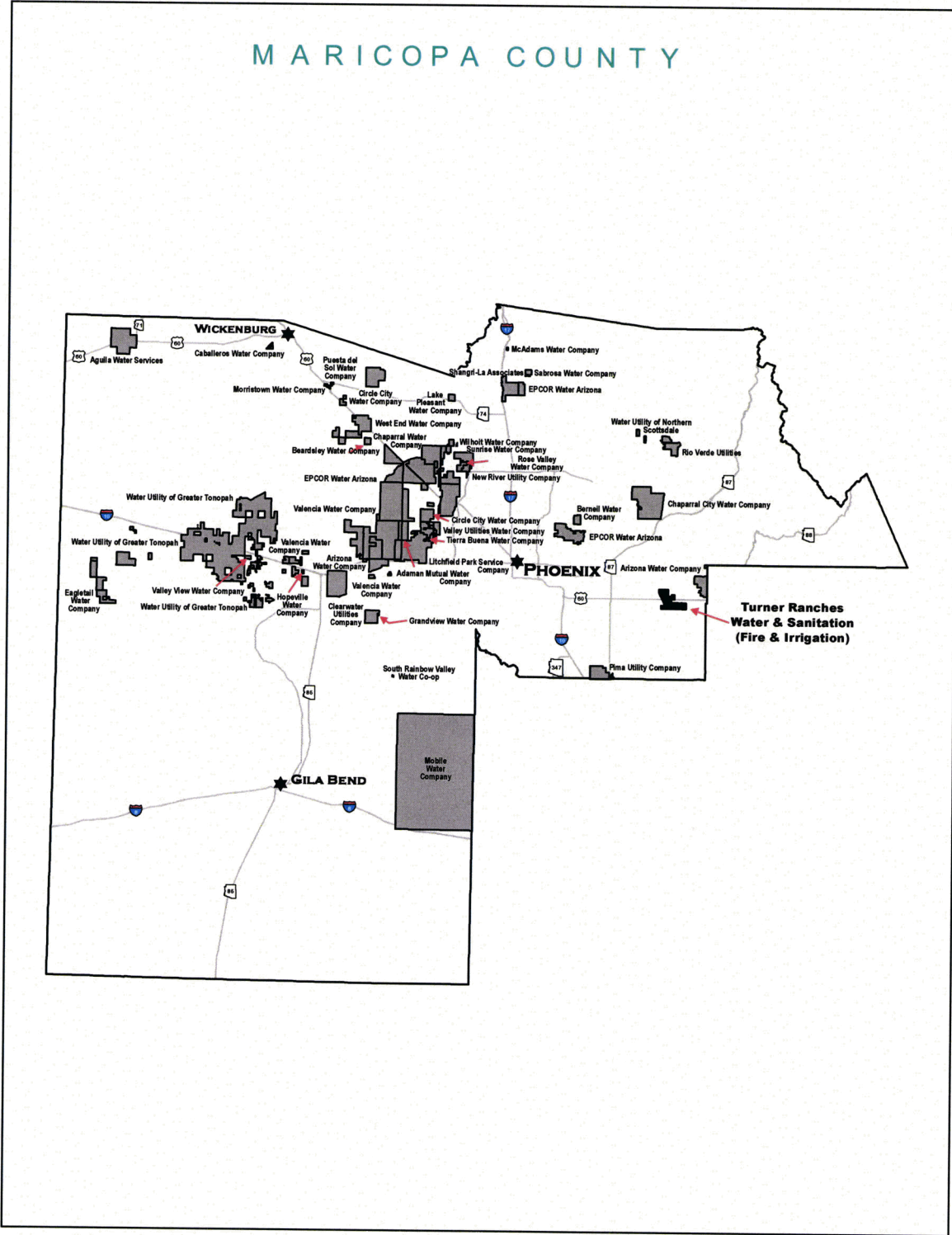


Figure 2. Maricopa County Map

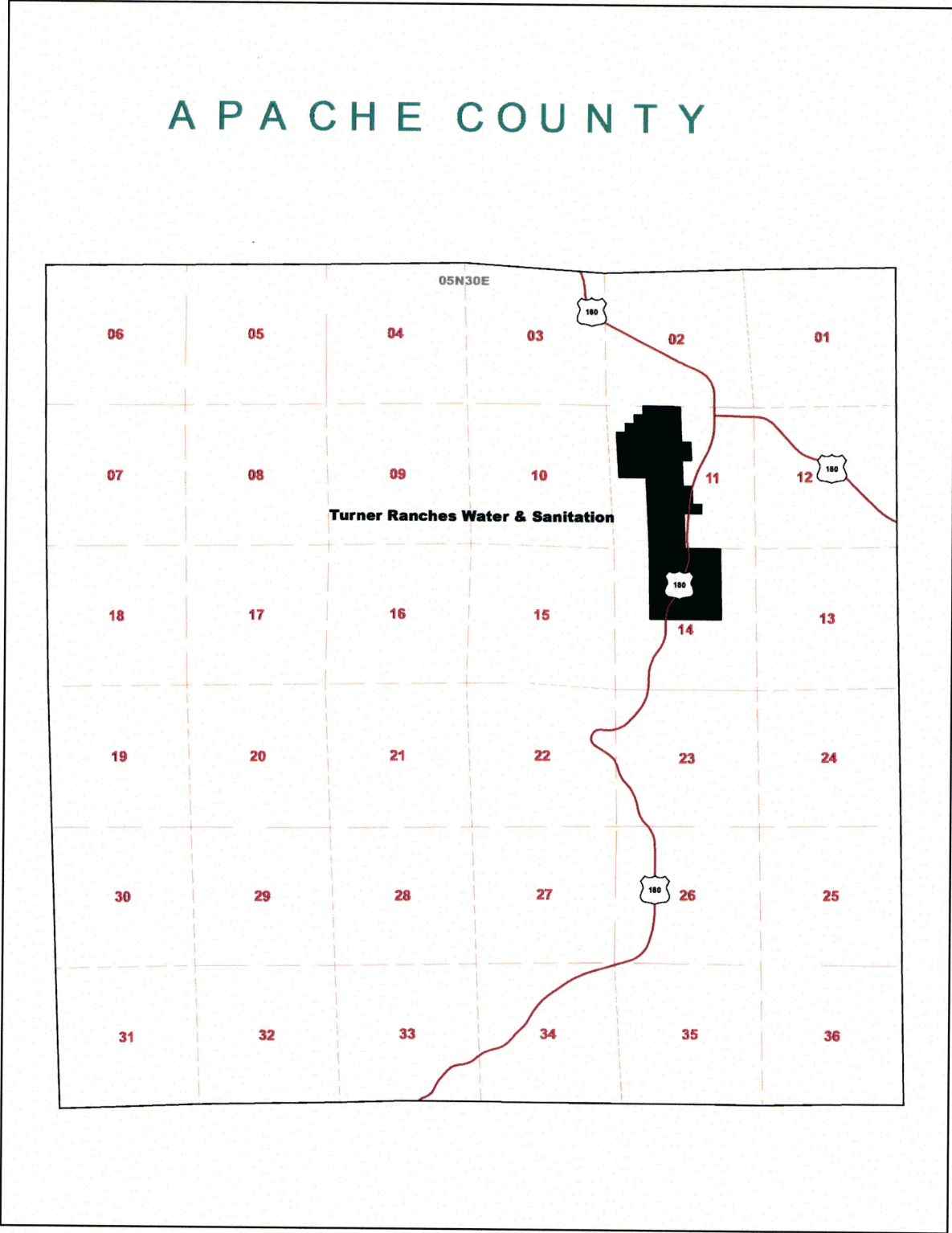


Figure 3. Certificated Area in Apache County

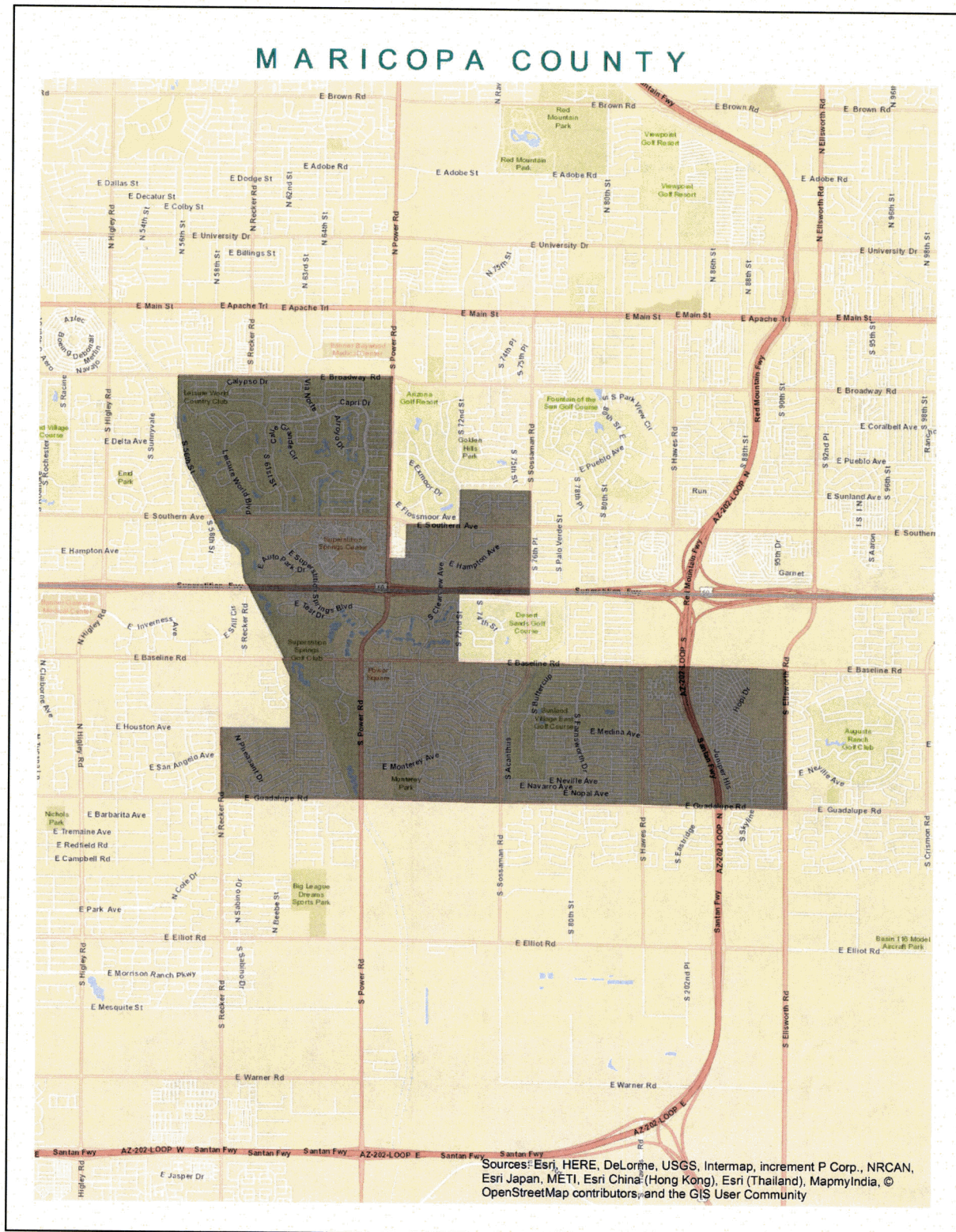


Figure 5. Detailed location of Certificated Area in Maricopa County

C. WATER USE

Water Sold

Figure 6 presents the water consumption data provided by the Company for the test year ending December 2015. This figure shows the customer consumption experienced a high monthly water use of 3,765,706 gallons per day (“gpd”) in July and low monthly water use of 558,387 gpd in December for an average annual use of 1,859,258 gpd.

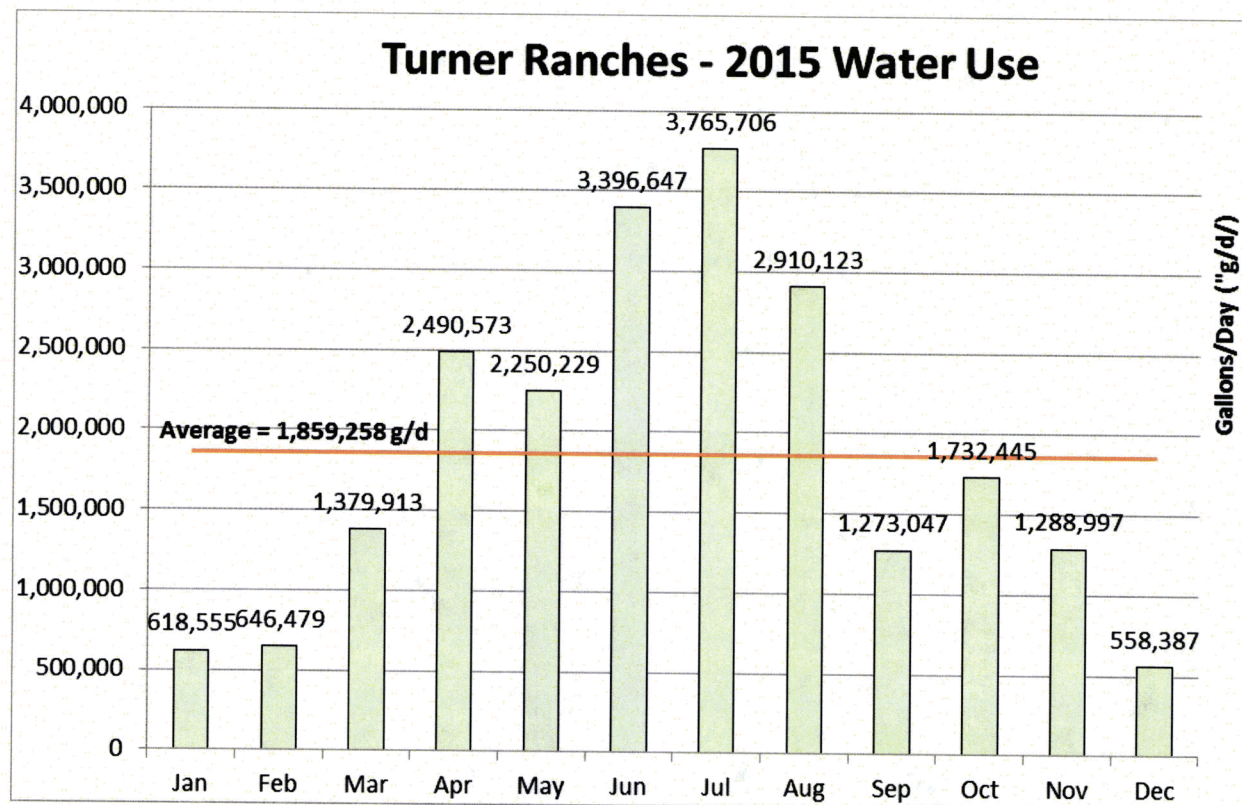


Figure 6. Water Use

Non-Account Water

Non-account water should be 10 percent or less. The annual reports for the past 10 years ending December 2015, revealed an average water loss of 0.6 percent. In its annual report for the year ending December 2015, the Company reported 681,395,500 gallons pumped and 507,708,000 gallons sold, however this did not include the unmetered gallons sold. Including the unmetered gallons sold the total gallons sold in 2015 was 681,255,400 resulting in a water loss of 0.02 percent.¹⁰ The water loss is within the acceptable level of 10 percent recommended by Staff. However, the water loss presented is misleading as the unmetered gallons sold is simply the difference between

¹⁰ Revised 2015 water consumption spreadsheet provided in email dated 4/27/2016 by Judy Lopez, president of First National Management.

gallons pumped and gallons sold.¹¹ If this were the case then each year would register zero water loss. Water sold to the 963 Leisure World residential customers for irrigation purposes are supplied by the fire and irrigation booster station which does not contain a water meter. Figure 7 shows the water loss over the past 10 years with a number of years where the water loss was a negative percentage. This seems to be an indication of acre-feet to gallons conversion errors and misreading of water meters.

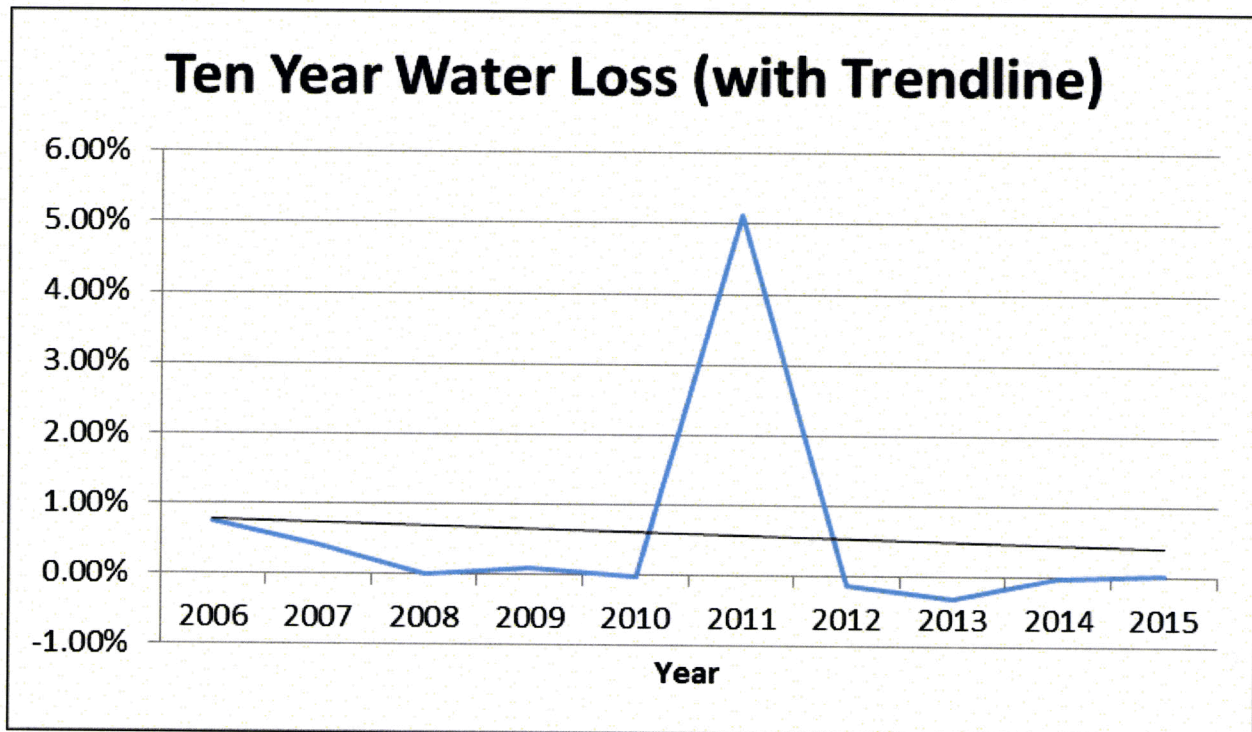


Figure 7. Water Loss

According to the water system operator it is unknown why there was 5.13 percent water loss in 2011. The operator surmised that the well pump meter readings were in error. This reasoning seems likely as the other yearly water losses are below 1.0 percent. Staff recommends that the Company install a water meter at the fire and irrigation booster station to register gallons sold to the Leisure World residential customers.

Water Usage

Figure 8 illustrates the amount of irrigation water sold over the past 10 years and also shows the decline in sales. In the Company's Response to Data Request No. FS 5.5 as to why there has been a reduction in sales, Turner Ranches stated that one customer, Superstition Spring Golf Course, has drastically reduced water consumption. The Company interviewed the golf course superintendent concerning the reduced consumption. According to the Company, the

¹¹ Water system operator, Ronny Lopez, states that "The UM gal [unmetered gallons] is calculated by the Total Gallons Pumped minus Gallons Metered to give Unmetered gallons.", email dated May 11, 2016

superintendent replied it was all driven by reducing costs as much as possible. The gallons sold data were acquired from the Company's annual reports and adjusted quantities provided by the Company. Utilizing linear regression, Figure 8 predicts that the Company's irrigation water sales will decline steadily at a slow rate.

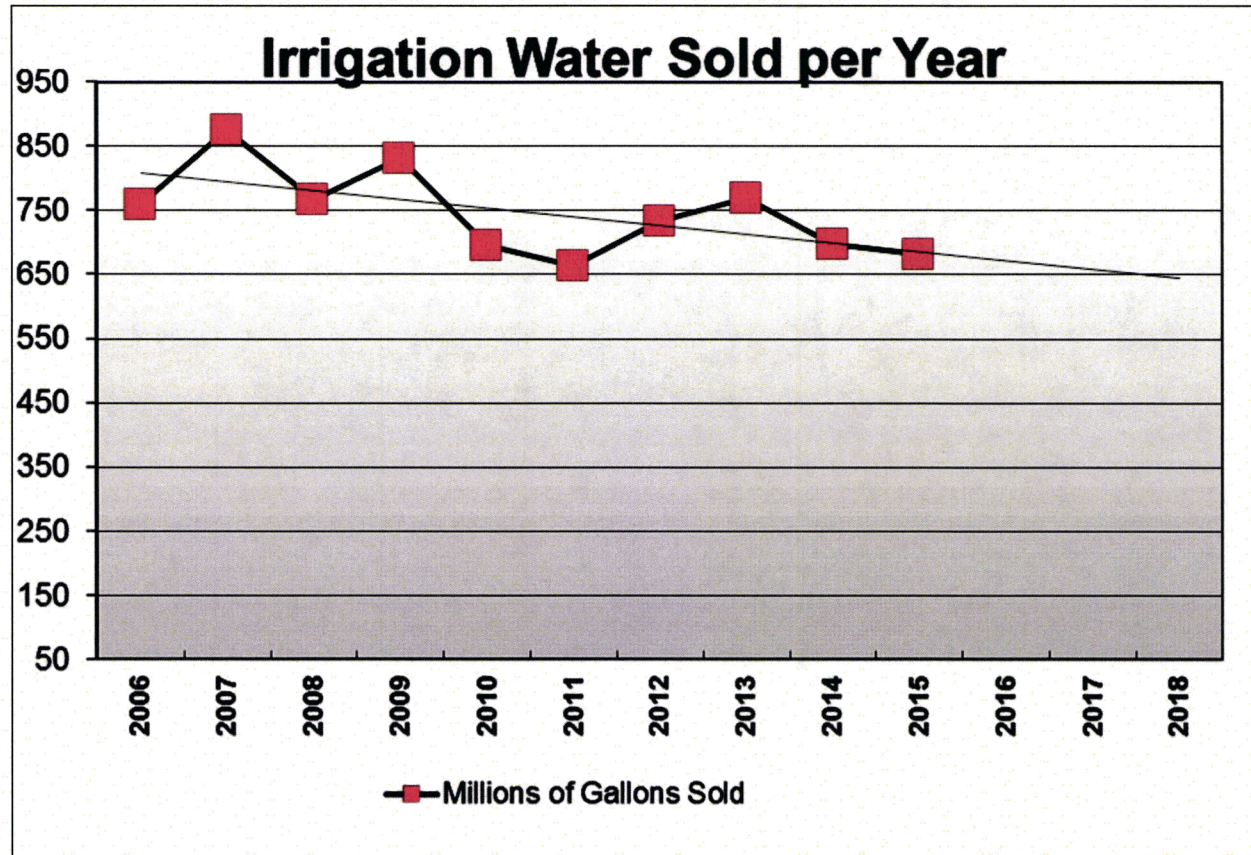


Figure 8. Irrigation Water Usage per Year

System Analysis

The Company has five groundwater wells totaling production capacity of approximately 5,380 gpm, three fire and irrigation booster pumps totaling approximately 2,500 gpm and one 400-500 gpm recirculation pump. The system has adequate irrigation and fire protection capacity to serve the present customer base and reasonable growth. The system does not have storage tank structures but utilizes a series of lakes to store irrigation and fire protection water.

D. GROWTH

In its application, the Company states it provides irrigation water service to four customers. The Company does not anticipate an increase in its customer base or new development in its CC&N within the near future.¹²

E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (“ADEQ”)

Compliance

The Company does not provide potable water and, therefore, is not regulated by ADEQ.

F. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”)

Compliance

The Company is located in the Phoenix Active Management Area (“AMA”). According to an ADWR Water Provider Compliance Report, dated March 17, 2016, the Company is not currently compliant with ADWR’s requirements governing water providers and/or community water systems. In its compliance report, ADWR could not determine water loss from the information provided by the Company. Staff and ADWR personnel met with the Company on May 24, 2016, to discuss possible resolutions. It was determined that a meter installed at the Fire and Irrigation station would satisfy ADWR’s requirements for compliance.

Staff recommends that any increase in rates approved by the Commission not become effective until the first day of the month after the Company files with Docket Control, as a compliance item in this docket, documentation from ADWR indicating that Turner Ranches water system is compliant with departmental requirements governing water providers and/or community water systems.

G. ACC COMPLIANCE

On May 1, 2015, the Utilities Division compliance database showed that the Company had no delinquent ACC compliance items.

H. DEPRECIATION RATES

The Company has been using Staff’s typical and customary depreciation rates. These depreciation rates are presented in Table 6 below and it is recommended that the Company continue to use these depreciation rates.

¹² See Narrative Description of Application for Rate Adjustment “Anticipated growth/decline in customers expected in the next two years,” discussion on page 3 of the Rate Application.

Table 6. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.5
306	Lake, River, Canal Intakes	40	2.5
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2
310	Power Generation Equipment	20	5
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20
320.3	Point-of-Use Treatment Devices	10	10
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5
331	Transmission & Distribution Mains	50	2
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2
336	Backflow Prevention Devices	15	6.67
340	Other Plant & Misc. Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20
341	Transportation Equipment	5	20
342	Stores Equipment	25	4
343	Tools, Shop & Garage Equipment	20	5
344	Laboratory Equipment	10	10
345	Power Operated Equipment	20	5
346	Communication Equipment	10	10
347	Miscellaneous Equipment	10	10

I. OTHER ISSUES

1. *Service Line and Meter Installation Charges*

Service line and meter installation charges are refundable advances. In its filing, the Company requested changes to its current Commission approved service line and meter installation charges.¹³ The Company requests the customer pay the actual cost of the meter and installation. Staff agrees with the Company's requested change. Staff recommends approval of the meter and installation charges listed under "Company's Requested/Staff Recommended Charges" in Table 7.

Table 7. Service line and meter installation charges

Meter Size	Company's Current and Commission Approved Charges	Company's Requested/Staff Recommended Charges
5/8" x 3/4"	\$400	At Cost
3/4"	\$440	At Cost
1"	\$500	At Cost
1-1/2"	\$715	At Cost
2" Turbo	\$715	At Cost
2" Compound	\$1,700	At Cost
3" Turbo	\$1,585	At Cost
3" Compound	\$2,190	At Cost
4" Turbo	\$2,540	At Cost
4" Compound	\$3,215	At Cost
6" Turbo	\$4,915	At Cost
6" Compound	\$6,270	At Cost
8" & Larger		At Cost

2. *Water Testing Expense*

The Company does not provide potable water and, therefore, does not participate in the ADEQ's Monitoring Assistance Program ("MAP"). The Company reported its water testing expenses for the test year at \$430. In 2014 and 2015, the Company experienced several months of decrease production in the TR-10 well. Water testing concluded that high levels of calcium is the reason for scaling of the well and pump. According to the owner the other wells are not affected. The Company forecasts a 2 percent increase per year in water testing costs. Staff regards a yearly increase of 2 percent to be a reasonable assumption. Staff recalculated the average water testing expense for the next 3 years. Staff recommends an annual water testing expense of \$447 be used for purposes of this application.

3. *Capital Improvement and Maintenance Projects*

In its financing application, the Company seeks approval of long-term debt financing for the

¹³ The Company's current charges were approved in ACC Decision No. 60927, dated May 26, 1998.

purpose of repaying First National Management for funding used to upgrade plant and perform needed maintenance on existing equipment located at water wells, pump stations and its distribution system. Table 8 shows a detailed listing of the Company's requested capital improvement projects that it regards as necessary to maintain service and reliability of the water system. Staff agrees with the order of project priorities. The Company asserts that since the City of Mesa effluent contract was discontinued as of July 2013, it became necessary to pump more groundwater to fulfill its customer irrigation requirements. According to the Company, the irrigation system is aged and requires upgrading.

Staff concludes that the Capital Improvements and Maintenance Projects proposed by the Company and contained in its financial application are appropriate and their associated cost estimates of \$660,500 appear to be reasonable. Of the ten priority projects listed only the TR-10 rebuild is completed. Staff re-inspected the water system on May 14, 2016, and found TR-10 well used and useful. However, no "used and useful" determination of the remaining proposed maintenance and plant additions were made, as none of the remaining proposed projects have been completed.

Table 8. List of Priority Capital Improvement and Maintenance Projects

Project Priority	Project Name	Company's Reasons for Upgrade or Maintenance	Description of Work to be Completed	Company Proposed & Staff Recommended Costs to be Financed ¹⁴
1	TR 10 Well Rebuild	Operator hearing knocking noise, output steadily dropping, well occasionally binds & will not operate.	Remove well, replacement of column pipe, tube & shaft, camera well, single casing patch, rebuild motor & bowl assembly & reinstall.	\$80,000 ¹⁵
2	Recker Well Rebuild	Well discharging silt (possible casing failure), output has declined rapidly & motor operating very noisy.	Remove well, replacement of column pipe, tube & shaft, camera well, single casing patch, rebuild motor & bowl assembly & reinstall.	\$92,210
3	TR 10 Well Back-Up	Do to loss of effluent contract in 2013, there is no current means of providing an alternative water supply to the SSGC.	Existing Leisure World effluent line extended 1,400 LF to SSGC irrigation lake. Would allow Recker or Broadway wells to deliver water to SSGC irrigation lake.	\$117,175
4	F & I Station Jockey Pump Addition	VFD controlled pump runs continually due to low flow thru station. Current pump is 75 hp with capacity of 800 gpm.	Install smaller VFD controlled pump that will provide minimum capacity of 250-300 gpm. Also needed in case existing pump fails.	\$33,720
5	Taylor Well Rebuild	Shaft wobbles considerably & motor casing severely corroded	Remove well, replacement of column pipe, tube & shaft, camera well, single casing patch, rebuild motor & bowl assembly & reinstall.	\$87,325 ¹⁶
6	Taylor Well Electrical Improvements	Existing electrical greater than 30 years old & MCC rusted in several areas & allows water leakage into MMC.	Replacement of MCC Cabinet & all electrical components.	\$55,250
7	Recirculation Station	Currently a single pump provide water to the upper lake. When failure occurs the Company must rent pumping equipment.	Installation of 2 nd pump of same capacity, alternate with existing pump & install all required electrical components.	\$32,000
8	Fire Hydrant Replacements	Six fire hydrants were not replaced during hydrant replacement program in 1998.	Excavation, removal of existing units, replace with new units and backfill.	\$29,000
9	Valve Replacements	Currently 10 distribution system valves do not operate.	Excavation, removal of existing units, replace with new units and backfill.	\$84,000
10	TR 11 Well Rebuild	During operation motor operates at a very high temperature.	Remove well, replacement of column pipe, tube & shaft, camera well, single casing patch, rebuild motor & bowl assembly & reinstall.	\$49,820

Note: Fire & Irrigation ("F & I"), Recommended ("Rec'd"), Motor Control Center ("MCC"), Superstition Springs Golf Course ("SSGC")

¹⁴ Company's estimated costs were provided by Arizona Licensed Contractors in the form of actual invoices, quotations or cost estimates for described work.

¹⁵ Company's estimated cost provided by email dated 5/11/2016 by Ronny Lopez, water system operator. TR-10 well became used and useful on May 9, 2016.

¹⁶ Estimate by the Company utilized pricing by Weber Pump and comparing costs with past repair of Broadway Well by Choice Pump, Fall of 2015.